Access DB# 126547

## SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: Amanda Walka Examiner #: 1/5463 Date: 6/30/2004  Art Unit: 1/59 Phone Number 30 7/2-1331 Serial Number: 4788 10/72281  Mail Box and Bldg/Room Location: 2814 9764 Results Format Preferred (circle): PAPER DISK E-MAIL										
If more than one search is submitted, please prioritize searches in order of need.										
**************************************										
Title of Invention: Bib Sheet Attack										
Inventors (please provide full names):										
Earliest Priority Filing Date:		•								
*For Sequence Searches Only* Please in appropriate serial number.	clude all pertinent informatio	on (parent, child, divisional, or issued patent numbers) along with the								
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Searcher Phone #:	AA Sequence (#)	Dialog								
Searcher Location:	Structure (#)									
Date Searcher Picked Up:	Bibliographic	Dr.Link								
Date Completed:	Litigation	Lexis/Nexis								
Searcher Prep & Review Time:	Fulltext	Sequence Systems								
Clerical Prep Time:	Patent Family	WWW/Internet								
Online Time:	Other	Other (specify)								

PTO-1590 (8-01)



# STIC Search Report

# STIC Database Tracking Number: 126547

TO: Amanda Walke Location: REM 9D64

Art Unit : 1752 July 12, 2004

Case Serial Number: 10/720815

From: Barba Koroma Location: EIC 1700

**REM EO4 A30** 

Phone: 571 272 2546

barba.koroma@uspto.gov

## Search Notes

Examiner Walke,

Please find attached results of the search you requested. Structures and compounds described were searched in REGISTRY and CAPLUS databases. The results were crossed with appropriate terms.

For your convenience, titles of hits are listed to help you peruse them quickly, followed by a detailed printout of records.

Please let me know if you have any questions. Thanks.



# EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, ElC 1700 Team Leader 571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form						
<ul> <li>I am an examiner in Workgroup: Example: 1713</li> <li>Relevant prior art found, search results used as follows:</li> </ul>						
☐ 102 rejection						
103 rejection						
☐ Cited as being of interest.						
Helped examiner better understand the invention.						
Helped examiner better understand the state of the art in their technology.						
Types of relevant prior art found:						
☐ Foreign Patent(s)						
<ul> <li>Non-Patent Literature         (journal articles, conference proceedings, new product announcements etc.)</li> </ul>						
> Relevant prior art not found:						
Results verified the lack of relevant prior art (helped determine patentability).						
Results were not useful in determining patentability or understanding the invention.						
Comments:						

Drop off or send completed forms to EIC1700 REMSEN 4B28



Page 1Walke10722815

=> file reg

FILE 'REGISTRY' ENTERED AT 16:41:19 ON 12 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2004 HIGHEST RN 708207-86-7 DICTIONARY FILE UPDATES: 11 JUL 2004 HIGHEST RN 708207-86-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> file caplus

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FILE COVERS 1907 - 12 Jul 2004 VOL 141 ISS 3 FILE LAST UPDATED: 11 Jul 2004 (20040711/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que

L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON POLYVINYLPYRROLIDONE/CN
L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON "POLY(N.N-DIMETHYLACRYLA)

1 SEA FILE=REGISTRY ABB=ON PLU=ON "POLY(N,N-DIMETHYLACRYLAMIDE)
"/CN

L8

8 SEA FILE=REGISTRY ABB=ON PLU=ON ("SULFONIC ACID LS"/CN OR
"SULFONIC ACID, ((3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL)ME
THYL)-, MONOBUTYL ESTER, NICKEL COMPLEX"/CN OR "SULFONIC ACID,
PHOSPHINO-"/CN OR "SULFONIC ACIDS"/CN OR "SULFONIC ACIDS,
ALKANE, CHLORO"/CN OR "SULFONIC ACIDS, ALKANE, CHLORO, SODIUM
SALTS"/CN OR "SULFONIC ACIDS, ALKANE, SODIUM SALTS"/CN OR
"SULFONIC ACIDS, ALKANEDI-, DISODIUM SALTS"/CN OR "SULFONIC
ACIDS, ALKANESULFONIC, CHLORO"/CN)

L9

10 SEA FILE=REGISTRY ABB=ON PLU=ON ("P-TOLUENESULFONIC ACID"/CN OR "P-TOLUENESULFONIC ACID ((4R)-2,2-DIMETHYL-1,3-DIOXOLAN-4-YL )METHYL ESTER"/CN OR "P-TOLUENESULFONIC ACID ((4S)-2,2-DIMETHYL-1,3-DIOXOLAN-4-YL)METHYL ESTER"/CN OR "P-TOLUENESULFONIC ACID (1-BENZYL-4-CYANO-4-PIPERIDYL)METHYL ESTER"/CN OR "P-TOLUENESULFONIC ACID GS)-2-METHYLBUTYL ESTER"/CN OR "P-TOLUENESULFONIC ACID B-ETHOXYETHYL ESTER"/CN OR "P-TOLUENESULFONIC ACID B-METHOXYETHYL ESTER"/CN OR "P-TOLUENESULFONIC ACID 1,2-DIAMINOETHANE SALT (2:1)"/CN OR "P-TOLUENESULFONIC ACID 1,6-DIAMINOHEXANE SALT (2:1)"/CN OR "P-TOLUENESULFONIC ACID 1-METHYLHEPTYL ESTER"/CN)

L11

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

STR

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L12		SCR 2043						
L14	9528	SEA FILE=REGISTRY SSS FUL L11 AND L12						
L15	44277	SEA FILE=CAPLUS ABB=ON PLU=ON L1 OR L6 OR L14						
L16	1	SEA FILE=REGISTRY ABB=ON PLU=ON "POTASSIUM HYDROXIDE"/CN						
L17	1	SEA FILE=REGISTRY ABB=ON PLU=ON "SODIUM HYDROXIDE"/CN						
L18	2	SEA FILE=REGISTRY ABB=ON PLU=ON TMAH/CN						
L19	94179	SEA FILE=CAPLUS ABB=ON PLU=ON L16 OR L17 OR L18						
L20	366	SEA FILE=CAPLUS ABB=ON PLU=ON L15 AND L19						
L21	12	SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND (PHOTORESIST OR						
	RESIST)							
L22	0	SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND OVERCOAT? (5A) COMPOSITIO						
		N?						
L23	22	SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND COAT? (5A) COMPOSITION?						
L24	33	SEA FILE=CAPLUS ABB=ON PLU=ON (L21 OR L22 OR L23)						
L25	10417	SEA FILE=CAPLUS ABB=ON PLU=ON L8 OR L9						
L27	84	SEA FILE=CAPLUS ABB=ON PLU=ON L15 AND L25						

#### Page 3Walke10722815

L28	6 SEA FILE=CAPLUS ABB=ON PLU=ON L27 AND (L19 OR (POTASSIUM OR
	SODIUM) (5A) HYDROXIDE)
L29	5 SEA FILE=CAPLUS ABB=ON PLU=ON L27 AND (POTASSIUM OR SODIUM) (5
	A) HYDROXIDE
L30	6 SEA FILE=CAPLUS ABB=ON PLU=ON L28 OR L29
L31	3 SEA FILE=CAPLUS ABB=ON PLU=ON L30 AND (COAT? OR ?RESIST)
L32	35 SEA FILE=CAPLUS ABB=ON PLU=ON L24 OR L31

#### => d ti 1-35

- L32 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Protective seed-coating composition
- L32 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Nucleic-acid ink compositions for arraying onto a solid support
- L32 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Coating compositions for formation of thin porous silica films with low refractive index
- L32 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Pesticidal compositions for coating plant propagation material containing anthranilamides
- L32 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Synthesis of new polymers for **photoresist** and lithographic printing applications
- L32 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI 'Method for forming fine **resist** patterns with excellent dimensional uniformity
- L32 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Absorption agents for hygienic materials with a high swelling capacity reduced tendency to cake
- L32 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Multi-layer reaction mixtures and apparatuses for delivering a volatile component via a controlled exothermic reaction
- L32 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Acrylic enteric coating compositions
- L32 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Composition and process for coating tin oxide-based transparent conductive film
- L32 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Composition for antireflection coating on photoresist film

#### Page 4Walke10722815

- L32 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects
- L32 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI **Photoresist** pattern formation, semiconductor device, and its manufacture by using the method
- L32 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Stabilized compositions containing benzimidazole compounds or their alkali metal salts and their enteric coated preparations
- L32 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Coating agents for oral formulations containing HMG-CoA reductase inhibitors
- L32 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Cyclized copolymer of methacrylic anhydride and an application to **photoresist** with photoacid generator
- L32 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Semiconductor device having fine patterns and its fabrication
- L32 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Metal thin-film pattern formation by electroless plating of photoresist
- L32 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Composition for the detection of electrophilic gases and methods of use thereof
- L32 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Enteric film coating compositions for coating pharmaceutical tablets
- L32 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Coating compositions for water-based ink-printable transparent sheets
- L32 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Resist pattern formation with pretreatment with agueous solution
- L32 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Synthesis of new metal-free diazonium salts and their applications to microlithography
- L32 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI A body-fluid assay stick with an ink composition
- L32 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI A body fluid assay stick for glucose detection and protein detection

#### Page 5Walke10722815

and/or pH determination, and a method for manufacturing the stick

- L32 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- A pH determination ink composition containing a quaternary ammonium or amine salt and basic substance and a test stick for pH determination
- L32 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Drain cleaner
- L32 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Developers for positive-working photoresists
- L32 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Ink-jet recording system TI
- L32 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Processing photosensitive silver halide color photographic material
- L32 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Image formation material and correction method
- L32 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TIHigh contrast photoresist developer
- L32 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Colored pH-sensitive films and their uses
- L32 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- Preventing deposition in polymerization and polymerization reaction apparatus
- L32 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Visual recording

### => d ibib abs hitstr ind total 132

L32 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:331752 CAPLUS

DOCUMENT NUMBER:

140:334101

TITLE:

Protective seed-coating composition

INVENTOR(S):

Lynch, John F.

PATENT ASSIGNEE(S):

Mex.

SOURCE:

U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

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```
US 2004077498
                        Α1
                             20040422
                                            US 2003-610728
                                                              20030701
 PRIORITY APPLN. INFO.:
                                         US 2002-393153P P 20020701
     The seed coating composition has a first protective polymer
      film coating, which is nonphytotoxic, maintains oxygen exchange
     properties, and is hygroscopic. The composition also has a secondary
     growth-stimulating coating.
      1310-58-3, Potassium Hydroxide, biological studies
 IT
      9003-39-8, Polyvinylpyrrolidone
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
         (protective seed-coating composition containing)
RN
     1310-58-3 CAPLUS
     Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)
CN
K-OH
     9003-39-8 CAPLUS
RN
CN
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 88-12-0
     CMF C6 H9 N O
  CH = CH_2
IC
     ICM A01N025-26
NCL 504100000
     5-3 (Agrochemical Bioregulators)
ST
     protective seed coating compn polymer fertilizer
     phytohormone
IT
     Polyoxyalkylenes, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (plasticizer; protective seed-coating composition
        containing)
IT
     Seed
        (protective seed-coating composition)
IT
    Auxins
    Cytokinins
    Fertilizers
    Hormones, plant
    RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (protective seed-coating composition containing)
IT
    Lecithins
    RL: MOA (Modifier or additive use); USES (Uses)
```

```
(surfactant; protective seed-coating composition containing)
 IT
      9002-89-5, Polyvinyl alcohol
                                    9003-20-7, Polyvinyl acetate
                                                                  9004-64-2,
      Hydroxypropylcellulose
                              9004-67-5, Methylcellulose
                                                           9032-42-2,
      Hydroxyethylmethylcellulose
                                  25086-89-9
                                                37353-59-6,
      Hydroxymethylcellulose
      RL: MOA (Modifier or additive use); USES (Uses)
         (binder; protective seed-coating composition containing)
     56-81-5, Glycerin., uses
 IT
                                57-55-6, Propylene Glycol, uses
     Acetyltriethyl citrate 77-90-7, Acetyltributyl citrate 77-93-0,
                       102-76-1, Glyceryl triacetate
     Triethyl citrate
                                                        109-43-3,
     Dibutylsebacate 25322-68-3, Polyethylene glycol
     RL: MOA (Modifier or additive use); USES (Uses)
         (plasticizer; protective seed-coating composition
        containing)
     57-13-6, Urea, biological studies 65-85-0, Benzoic acid, biological
 IT
              69-72-7, Salicylic acid., biological studies 77-06-5,
     Gibberellic acid
                       574-85-6, Fluorazol
                                            759-94-4
                                                        1071-83-6, Glyphosate
     1310-58-3, Potassium Hydroxide, biological studies
                                                        1918-00-9,
               4401-74-5, Urea phosphate 6484-52-2, Ammonium nitrate,
     biological studies 7439-89-6, Iron, biological studies
                                                               7439-96-5.
     Manganese, biological studies
                                   7440-50-8, Copper, biological studies
     7440-66-6, Zinc, biological studies
                                         7440-70-2, Calcium, biological
               7447-40-7, Potassium chloride, biological studies 7487-88-9,
     MAgnesium sulfate, biological studies 7631-95-0, Sodium molybdate
     7757-79-1, Potassium nitrate, biological studies 7778-80-5, ,Potassium
     sulfate, biological studies
                                   7783-20-2, Ammonium sulfate, biological
     studies 9003-39-8, Polyvinylpyrrolidone
                                             9004-38-0, Cellulose
     acetate phthalate 9004-65-3, Hydroxypropylmethylcellulose
                                                                  9011-16-9
     9032-50-2, Methylcellulose phthalate 10124-31-9, Ammonium phosphate
     10124-37-5, Calcium nitrate 10377-60-3, Magnesium nitrate
                                                                  12027-67-7.
     Ammonium Molybdate
                        13840-56-7, Sodium borate
                                                     15972-60-8, Alachlor
     16068-46-5, Potassium phosphate 19045-66-0D, Thiocarbamic acid, salts
     and esters 34256-82-1, Acetochlor. 37324-30-4, Hydroxypropylcellulose
     phthalate 37764-25-3, N,N-Diallyl dichloroacetamide
                                                            51218-45-2,
     Metolachlor 53237-50-6
                              74782-23-3, Oxabetrinil
                                                        78370-21-5,
     Cyometrinil
                   98723-86-5, Hydroxymethyl cellulose phthalate
                                                                  157480-63-2,
     Hydroxyethyl methyl cellulose phthalate 681029-93-6, Carboxymethyl
     cellulose phthalate
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (protective seed-coating composition containing)
IT
     151-21-3, Sodium lauryl sulfate, uses
                                            9005-65-6, Polysorbate 80
     9005-67-8, Polysorbate 60
                                106392-12-5
     RL: MOA (Modifier or additive use); USES (Uses)
        (surfactant; protective seed-coating composition containing)
L32 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                        2004:220075 CAPLUS
DOCUMENT NUMBER:
                        140:248187
TITLE:
                        Nucleic-acid ink compositions for arraying onto a
                        solid support
INVENTOR(S):
                        Pal, Santona
PATENT ASSIGNEE(S):
                        USA
```

SOURCE:

U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004054160	A1	20040318	US 2002-244898	20020916
WO 2004024958	A1	20040325	WO 2003-US29086	20030916

W: JP

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR

PRIORITY APPLN. INFO.:

US 2002-244898 A 20020916

AB A medium or ink solution containing nucleic acid is provided for depositing onto

a solid support in the manufacture of biol. arrays. The medium has a composition

that comprises: about 30% to about 80% by volume of an organic solution comprising

dimethylsulfoxide (DMSO), ethylene glycol (EG), formamide, or a combination thereof; a buffer with a pH value of about 3.5-9.5; water; and nucleic acid, wherein the nucleic acid denatures to provide for more favorable hybridization. The buffer can be made from a solution that may contain acetate, citrate, citrate-phosphate, maleate, or succinate. The medium permits long-term storage of nucleic acids in solution without excessive degradation, which is a phenomenon associated with many conventional ink solns.

IT 1310-73-2, Sodium hydroxide, uses 38000-06-5, Polylysine RL: NUU (Other use, unclassified); USES (Uses)

(nucleic-acid ink compns. for arraying onto a solid support)

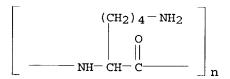
RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

 ${\tt Na}^-{\tt OH}$ 

RN 38000-06-5 CAPLUS

CN Poly[imino[(1S)-1-(4-aminobutyl)-2-oxo-1,2-ethanediyl]] (9CI) (CA INDEX NAME)



IC ICM C12Q001-68

#### Page 9Walke10722815

```
ICS C07H021-04
NCL 536024300; 435006000
     3-1 (Biochemical Genetics)
    nucleic acid ink compn arraying solid support
ST
IT
     Surface
        (Aminated; nucleic-acid ink compns. for arraying onto a solid support)
IT
    Molecules
        (Multivalent; nucleic-acid ink compns. for arraying onto a solid
        support)
     Polymers, uses
IT
     RL: NUU (Other use, unclassified); USES (Uses)
        (Neutral; nucleic-acid ink compns. for arraying onto a solid support)
IT
    Solutions
        (Organic; nucleic-acid ink compns. for arraying onto a solid support)
IT
    Surface
        (Planar; nucleic-acid ink compns. for arraying onto a solid support)
ΙT
    Functional groups
        (anhydride group; nucleic-acid ink compns. for arraying onto a solid
        support)
\mathbf{IT}
    DNA
    RL: ARG (Analytical reagent use); DEV (Device component use); PEP
     (Physical, engineering or chemical process); PYP (Physical process); ANST
     (Analytical study); PROC (Process); USES (Uses)
        (double-stranded; nucleic-acid ink compns. for arraying onto a solid
        support)
    Adhesion, physical
    Aggregation
    Buffers
    Cations
      Coating materials
    Composition
    Concentration (condition)
    DNA microarray technology
    Decomposition
    Denaturation
    Glass substrates
    Inks
    Membranes, nonbiological
    Microarray technology
    Nucleic acid hybridization
    Precipitation (chemical)
    Preservation
    Printing (impact)
    Solids
    Solutions
    Storage
    Surface
    Suspensions
    Viscosity
    Volume
    Wettability
    pН
```

```
(nucleic-acid ink compns. for arraying onto a solid support)
IT
     Nucleic acids
     Oligonucleotides
     RNA
     RL: ARG (Analytical reagent use); DEV (Device component use); PEP
     (Physical, engineering or chemical process); PYP (Physical process); ANST
     (Analytical study); PROC (Process); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
IT
     Glass, uses
     RL: DEV (Device component use); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
     Histones
     RL: NUU (Other use, unclassified); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
TT
     Inorganic compounds
     RL: NUU (Other use, unclassified); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
IT
     Organic compounds, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
IT
     Denaturation
        (thermal; nucleic-acid ink compns. for arraying onto a solid support)
IT
     6382-82-7, γ-Aminopropylsilane 9011-13-6, Styrene-maleic anhydride
     copolymer 13598-78-2D, Aminosilane, alkyl derivs.
     RL: DEV (Device component use); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
IT
     60-00-4, EDTA, uses 64-19-7, Acetic acid, uses 67-68-5, DMSO, uses
     71-44-3, Spermine 75-12-7, Formamide, uses
                                                   77-92-9, Citric acid, uses
     107-21-1, Ethylene glycol, uses
                                       110-15-6, Succinic acid, uses
     110-16-7, 2-Butenedioic acid (2Z)-, uses 124-20-9, Spermidine
     127-09-3, Sodiumacetate 994-36-5, Sodium citrate 1310-73-2,
     Sodium hydroxide, uses 7632-05-5, Sodiumphosphate
                                                           7732-18-5, Water,
            14265-44-2, Phosphate, uses 14695-95-5
                                                      25104-18-1, Polylysine
     38000-06-5, Polylysine
     RL: NUU (Other use, unclassified); USES (Uses)
        (nucleic-acid ink compns. for arraying onto a solid support)
L32 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         2003:491332 CAPLUS
DOCUMENT NUMBER:
                         139:54384
TITLE:
                         Coating compositions for formation
                         of thin porous silica films with low refractive index
INVENTOR (S):
                         Sasaki, Yoro; Hanahata, Hiroyuki; Ioka, Takaaki
PATENT ASSIGNEE(S):
                         Asahi Kasei Kabushiki Kaisha, Japan
SOURCE:
                         PCT Int. Appl., 94 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE ·
                         Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
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WO 2003052003
                     A1
                            20030626
                                          WO 2002-JP13081 20021213
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN.
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
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             PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                        JP 2001-381084 A 20011214
                                        JP 2002-45098
                                                        A 20020221
    Title compns. comprise (a) fluidable SiO2 precursors prepared by hydrolytic
AB
    polycondensation of R1aSi(OR2)4-a [R1 = H, C1-10 alkyl, C6-10 aryl, vinyl,
    vinyl group-containing C3-10 organic group, (meth)acryloyl-containing C4-10
organic
    group, epoxy group-containing C3-10 organic group; R2 = C1-6 alkyl; n =0-2]
    and/or (R3O)3SiR4mSi(OR3)3 (R3 = C1-6 alkyl; R4 = C1-6 alkylene, C6-10
    arylene; m = 0-1) in the presence of acid catalysts, (b) OH-containing or
    N-containing basic compds. forming 0.1 N aqueous solns. with a pH of ≥11
    and 100° vapor pressure of ≤1.3 kPa at an amount of 0.0015-0.5
    mol (based on the OH group or N atom) per 1-mol Si atom, and (c) the
    fluidable SiO2 precursor-compatible organic compds. with a b.p. of
    ≥100°. A composition containing 80:20 MeSi(OEt)3-Si(OEt)4 copolymer
     (prepared in presence of H3PO4), polyoxyethylene di-Me ether, NaOH at 0.10
    mol/Si, and H2O/propylene glycol mono-Me ether solvent blend was spin
    coated on a Si wafer, cured at 100° for 1 min, soaked in 1:1
    H2O/EtOH blend, and dried at 100° for 1 min to form porous thin
    film showing reflective index 0.1%, transparency 99.0%, refractive index
    1.210 at 1.95 eV, and pencil hardness HB.
    1310-73-2, Sodium hydroxide, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
    (Uses)
        (alkoxysilane condensate-, basic compound- and high b.p. compound-containing
       coatings for formation of thin porous SiO2 film with low refractive
       index)
    1310-73-2 CAPLUS
    Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
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Na- ОН

IT

RN

CN

IT 9003-39-8, Poly(vinyl pyrrolidone)

RL: PRP (Properties); TEM (Technical or engineered material use); USES

(high b.p., polysiloxane-compatible; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index)

CMF C6 H9 N O

RN 9003-39-8 CAPLUS
CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

IC ICM C09D005-00
 ICS C09D007-12; C09D183-02; C09D183-04; C09D183-14
CC 42-13 (Coatings, Inks, and Related Products)

Section cross-reference(s): 73, 74

ST alkoxysilane condensate basic compd coating formation thin silica film; high boiling point compd polysiloxane formation porous silica film; low refractive index porous thin silica film formation coating

IT Antireflective films

(alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index)

IT Polysiloxanes, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index)

IT Amines, uses

Hydroxides (inorganic)

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index)

IT Ouaternary ammonium compounds, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index)

IT Polyoxyalkylenes, uses

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(alkyl group-terminated, high b.p., polysiloxane-compatible; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index)

ΙT Transparent materials (coatings; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) IT Carbohydrates, uses Esters, uses Polyamides, uses Polycarbonates, uses Polyesters, uses RL: PRP (Properties); TEM (Technical or engineered material use); USES (high b.p., polysiloxane-compatible; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) IT Cation exchangers (hydrolytic polycondensation catalyst; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) IT Acids, uses RL: CAT (Catalyst use); USES (Uses) (hydrolytic polycondensation catalyst; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) ITAlcohols, uses RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (polyhydric, high b.p., polysiloxane-compatible; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) ITCoating materials (transparent; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) IT 88029-70-3P, Methyltriethoxysilane-tetraethoxysilane copolymer 512195-55-0P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) 112-24-3, Triethylenetetramine 112-57-2, Tetraethylenepentamine IT1310-73-2, Sodium hydroxide, uses 4499-86-9, Tetrapropylammonium hydroxide 9002-98-6 26913-06-4, Poly[imino(1,2-ethanediyl)] RL: PRP (Properties); TEM (Technical or engineered material use); USES (alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) IT 64-17-5, Ethanol, uses 67-64-1, Acetone, uses RL: NUU (Other use, unclassified); USES (Uses) (aqueous blends, for extraction of high b.p. organic compds.; alkoxysilane

condensate-, basic compound- and high b.p. compound-containing coatings for

formation of thin porous SiO2 film with low refractive index) IT102-76-1, Glycerol triacetate 110-71-4, 1,2-Dimethoxyethane 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Polyacrylic acid 9003-05-8, Polyacrylamide 9003-09-2, Methyl vinyl ether homopolymer 9003-39-8, Poly(vinyl pyrrolidone) 9004-34-6, Cellulose, uses 24991-55-7, Polyethylene glycol dimethyl ether 99788-44-0, Sucrose triacetate RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (high b.p., polysiloxane-compatible; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) IT 7664-38-2, Phosphoric acid, uses 135153-08-1, Diaion RCP 160H RL: CAT (Catalyst use); USES (Uses) (hydrolytic polycondensation catalyst; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) 7631-86-9P, Silica, uses IT RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (porous thin films; alkoxysilane condensate-, basic compound- and high b.p. compound-containing coatings for formation of thin porous SiO2 film with low refractive index) REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L32 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2003:242097 CAPLUS DOCUMENT NUMBER: 138:267201 TITLE: Pesticidal compositions for coating plant propagation material containing anthranilamides INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA SOURCE: PCT Int. Appl., 147 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----------WO 2003024222 **A**1 20030327 WO 2002-US30302 20020910 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

NE, SN, TD, TG

EP 1427285 **A**1 20040616 EP 2002-775972 20020910

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK PRIORITY APPLN. INFO.: US 2001-323941P P 20010921

WO 2002-US30302 W 20020910

OTHER SOURCE(S):

MARPAT 138:267201

GI

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones,  $\gamma$ -aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting.

9003-39-8, Polyvinylpyrrolidone IT

> RL: AGR (Agricultural use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(in pesticidal compns. for plant propagation material containing anthranilamides)

RN9003-39-8 CAPLUS

CN2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1 CRN 88-12-0 CMF C6 H9 N O

IT 1310-58-3, Potassium hydroxide, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of anthranilamide compds. as pesticides for plant propagation material)

RN 1310-58-3 CAPLUS

CN Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)

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IC ICM A01N043-56

CC 5-4 (Agrochemical Bioregulators)

Section cross-reference(s): 28

ST arthropodicide insecticide anthranilamide prepn propagule seed

IT Insecticides

(carbamate; in pesticidal compns. for plant propagation material containing anthranilamides)

IT Leaf

(cutting; pesticidal compns. containing anthranilamides for treatment of)

IT Eubacteria

Fungi

Virus

(entomopathogenic; in pesticidal compns. for plant propagation material containing anthranilamides)

IT Adhesives

Bacillus thuringiensis aizawai

Bacillus thuringiensis kurstaki

Baculoviridae

Coating materials

Fungicides

GABA antagonists

Gums and Mucilages

Latex

(in pesticidal **compns**. for plant propagation material containing anthranilamides)

IT Macrolides

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(in pesticidal compns. for plant propagation material containing anthranilamides)

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Acrylic polymers, biological studies
IT
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     Fats and Glyceridic oils, biological studies
IT
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Gelatins, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
ΙT
     Oils
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Polyoxyalkylenes, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     Polysaccharides, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Proteins
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Shellac
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Waxes
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Zeins
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     Juvenile hormones
IT
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
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(Biological study); USES (Uses)
        (mimics; in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
    Melon (plant)
        (musk-; pesticidal compns. containing anthranilamides for plant propagation
        material of)
    Insecticides
IT
        (neonicotinoid; in pesticidal compns. for plant propagation material
        containing anthranilamides)
IT
    Onion (Allium cepa)
        (ornamental; pesticidal compns. containing anthranilamides for plant
        propagation material of)
IT
    Anemone
    Armeria
    Avena sativa
    Begonia tuberhybrida
    Beta vulgaris
    Brassica juncea
    Brassica nigra
    Brassica oleracea capitata
    Calla
    Capsicum
    Chionodoxa
    Chrysanthemum
    Coleus
    Cosmos (plant)
    Crocus (plant)
    Cucumis sativus
    Cyclamen
    Dahlia (plant)
    Daucus carota
    Durum wheat
    Freesia
    Geranium (horticultural common name)
    Gerbera
    Gladiolus
    Gloxinia (genus)
    Gossypium hirsutum
    Gypsophila elegans
    Hordeum vulgare
    Hyacinth (plant)
    Impatiens
    Iris (plant)
    Lactuca sativa
    Liatris spicata
    Lilium
    Linum usitatissimum
    Lisianthus
    Lycopersicon esculentum
    Marigold
    Medicago sativa
    Muscari racemosum
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Narcissus
Nicotiana tabacum
Onion (Allium cepa)
Oryza sativa
Oxalis corniculata
Peanut (Arachis hypogaea)
Petunia
Phaseolus lunatus
Phaseolus vulgaris
Pisum sativum
Puschkinia libanotica
Rapeseed
Scabiosa atropurpurea
Secale cereale
Snapdragon (Antirrhinum)
Solanum melongena
Solanum tuberosum
Sorghum
Soybean (Glycine max)
Squash (Cucurbita)
Squill (plant)
Sunflower
Sweet potato
Tulip
Turnip
Vicia faba
Viola wittrockiana
Watermelon (Citrullus lanatus)
Yam (Dioscorea)
Yarrow (Achillea)
Zea mays
Zinnia
Zizania
   (pesticidal compns. containing anthranilamides for plant propagation
   material of)
Bulb (plant)
Seed
Stem
Tuber (plant organ)
   (pesticidal compns. containing anthranilamides for treatment of)
Pyrethrins
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
   (pyrethroids; in pesticidal compns. for plant propagation material
   containing anthranilamides)
Stem
   (rhizome; pesticidal compns. containing anthranilamides for treatment of)
Ion channel blockers
   (sodium; in pesticidal compns. for plant propagation material containing
   anthranilamides)
Toxins
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
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IT

TT

IT

IT

IT

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(Biological study); USES (Uses)
        (\delta-endotoxins; in pesticidal compns. for plant propagation
        material containing anthranilamides)
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     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
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     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
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(Biological study); USES (Uses)

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(anthranilamide compds. as pesticides for plant propagation material)

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Chlorfluazuron 71751-41-2, Abamectin
                                      72490-01-8 73989-17-0,
Avermectin
            74738-17-3, Fenpiclonil 76674-21-0, Flutriafol
                    78587-05-0 79538-32-2
                                              79622-59-6, Fluazinam
77732-09-3, Oxadixyl
79983-71-4, Hexaconazole
                         80060-09-9, Diafenthiuron
                                                    82657-04-3,
            83121-18-0 83657-18-5, Diniconazole-M
                                                    83657-24-3,
Bifenthrin
              84466-05-7, Amidoflumet
                                       85509-19-9, Flusilazole
Diniconazole
                                                             91465-08-6
86479-06-3 88283-41-4, Pyrifenox
                                  88671-89-0, Myclobutanil
                                       96489-71-3 101463-69-8
94361-06-5, Cyproconazole 95737-68-1
            103055-07-8 104030-54-8, Carpropamid 107534-96-3,
102851-06-9
             110488-70-5, Dimethomorph 111988-49-9
                                                      112226-61-6
Tebuconazole
112281-77-3, Tetraconazole 112410-23-8 114369-43-6, Fenbuconazole
116255-48-2, Bromuconazole 116714-46-6 118134-30-8, Spiroxamine
119168-77-3 119446-68-3, Difenoconazole 119791-41-2, Emamectin
120068-37-3 120928-09-8 121451-02-3 121552-61-2, Cyprodinil
122453-73-0, Chlorfenapyr 123312-89-0 123572-88-3, Furametpyr
124495-18-7, Quinoxyfen 125116-23-6, Metconazole
                                                  125225-28-7,
Ipconazole 126448-41-7, Acibenzolar 130000-40-7, Thifluzamide
131341-86-1, Fludioxonil 131807-57-3, Famoxadone 131860-33-8,
Azoxystrobin 131983-72-7, Triticonazole
                                         133408-50-1, Metominostrobin
133855-98-8, Epoxiconazole 134098-61-6 136426-54-5, Fluquinconazole
138261-41-3 139920-32-4, Diclocymet 140923-17-7, SZX0722
141517-21-7, Trifloxystrobin 143390-89-0, Kresoxim-methyl
                                                           143807-66-3,
Chromafenozide
               149877-41-8, Bifenazate 149961-52-4, Dimoxystrobin
153233-91-1 153719-23-4
                         154025-04-4, Flumetover 156052-68-5, RH 7281
            160430-64-8, Acetamiprid 161050-58-4
158062-67-0
                                                   161326-34-7
168316-95-8, Spinosad 170015-32-4 173584-44-6 175013-18-0,
Pyraclostrobin
                178928-70-6, Prothioconazole
                                            179101-81-6
                                                           180409-60-3,
            181587-01-9 188425-85-6, Nicobifen
                                                  189278-12-4,
Cyflufenamid
            210880-92-5, Clothianidin 211867-47-9, SYP-L190
Proquinazid
220899-03-6, Metrafenone 223580-51-6, Tiadinil
                                                248593-16-0,
Orysastrobin 283594-90-1 361377-29-9, Fluoxastrobin
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
   (in pesticidal compns. for plant propagation material containing
   anthranilamides)
75-35-4D, Vinylidene chloride, polymers and copolymers
                                                      79-41-4D,
Methylacrylic acid, imide derivs. 79-41-4D, Acrylimide, polymers and
copolymers, imide derivs. 8062-15-5, Lignosulfonate 9000-01-5, Gum
       9000-30-0, Guar gum 9000-36-6, Karaya gum
                                                    9000-65-1,
Tragacanth gum 9002-89-5 9002-89-5D, Polyvinyl alcohol, copolymers
9003-09-2, Polyvinyl methyl ether 9003-20-7D, Polyvinyl acetate,
derivs., copolymers 9003-39-8, Polyvinylpyrrolidone
Carboxymethylcellulose
                      9004-34-6D, Cellulose, derivs.
                                                       9004-53-9,
          9004-57-3, Ethylcellulose 9004-64-2, Hydroxypropylcellulose
Dextrins
9004-67-5D, Methylcellulose, derivs. 9005-25-8D, Starch, derivs.
9005-32-7, Alginic acid 9010-98-4, Polychloroprene
                                                    9011-16-9
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IT

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9012-76-4, Chitosan 9050-36-6, Malto-dextrin
                                                     25086-89-9
                                                                  25322-68-3,
                        26022-14-0, Polyhydroxyethyl acrylate
    Polyethylene oxide
                                                                 30811-69-9,
                        37353-59-6D, Hydroxymethylcellulose, derivs.
    Polyvinylacrylate
    69670-80-0, Hydroxymethylpropylcellulose
    RL: AGR (Agricultural use); TEM (Technical or engineered material use);
    BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
       anthranilamides)
    362637-53-4P
                   362637-70-5P
                                  362638-30-0P
                                                362639-62-1P
                                                                438450-41-0P,
\mathbf{IT}
    N-[4-Chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-
    pyridinyl) -3- (trifluoromethyl) -1H-pyrazole-5-carboxamide
                                                               500008-00-4P
                                                               500010-10-6P
                   500008-45-7P
                                  500008-60-6P
                                                 500008-62-8P
    500008-44-6P
    RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
        (preparation of anthranilamide compds. as pesticides for plant propagation
       material)
    129585-50-8P
IT
    RL: BYP (Byproduct); SPN (Synthetic preparation); PREP (Preparation)
        (preparation of anthranilamide compds. as pesticides for plant propagation
       material)
                                     75-03-6, Iodoethane
    74-89-5, Methylamine, reactions
                                                            75-31-0,
ТТ
    Isopropylamine, reactions 76-05-1, Trifluoroacetic acid, reactions
    79-37-8, Oxalyl chloride 98-59-9, p-Toluenesulfonyl chloride
    Phenylhydrazine 109-72-8, n-Butyllithium, reactions
    Cetyltrimethylammonium chloride 121-44-8, Triethylamine, reactions
    124-63-0, Methanesulfonyl chloride 128-09-6, N-Chlorosuccinimide
               421-50-1, 1,1,1-Trifluoroacetone 503-38-8, Trichloromethyl
    367-57-7
    chloroformate
                    541-41-3, Ethyl chloroformate
                                                    584-08-7, Potassium
                630-25-1, 1,2-Dibromotetrachloroethane 1310-58-3,
    carbonate
    Potassium hydroxide, reactions
                                     2402-77-9, 2,3-Dichloropyridine
    4111-54-0, Lithium diisopropylamide
                                          4389-45-1, 2-Amino-3-methylbenzoic
           4755-77-5, Ethyl chlorooxoacetate
                                               5437-38-7, 3-Methyl-2-
    nitrobenzoic acid 6226-25-1, 2,2,2-Trifluoroethyl
                                7087-68-5, N,N-Diisopropylethylamine
    trifluoromethanesulfonate
                                        7789-69-7, Phosphorus pentabromide
    7664-93-9, Sulfuric acid, reactions
    10025-87-3, Phosphorus oxychloride
                                        10035-10-6, Hydrogen bromide,
                                              20154-03-4, 3-
               14521-80-3, 3-Bromopyrazole
    Trifluoromethylpyrazole 22206-57-1, Tetrabutylammonium fluoride hydrate
                 65753-47-1, 2-Chloro-3-trifluoromethylpyridine 66176-17-8,
    22841-92-5
                                              458543-79-8 499790-43-1
    3-Methylisatoic anhydride
                                133228-21-4
     500011-81-4 500011-88-1
                                500011-94-9
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of anthranilamide compds. as pesticides for plant propagation
       material)
    14339-33-4P, 3-Chloropyrazole
                                    20776-67-4P, 2-Amino-3-methyl-5-
IT
    chlorobenzoic acid
                        68289-10-1P, 2-Amino-3-methyl-N-(1-
                                          128694-66-6P
                                                          362640-53-7P,
    methylethyl)benzamide 120374-68-7P
     3-Methyl-N-(1-methylethyl)-2-nitrobenzamide 362640-58-2P
                   362640-61-7P
                                  362640-62-8P
                                                 438450-38-5P,
     362640-60-6P
     3-Chloro-2-[3-(trifluoromethy1)-1H-pyrazol-1-y1]pyridine 438450-39-6P
     438450-40-9P, 6-Chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-
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pyrazol-5-yl]-8-methyl-4H-3,1-benzoxazin-4-one 458543-77-6P 458543-78-7P 499790-45-3P 499790-46-4P 500011-82-5P 500011-83-6P 500011-84-7P 500011-85-8P 500011-86-9P 500011-87-0P 500011-89-2P 500011-90-5P 500011-91-6P 500011-92-7P 500011-95-0P 500011-96-1P 500011-97-2P 500011-98-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of anthranilamide compds. as pesticides for plant propagation material) REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L32 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2002:753405 CAPLUS DOCUMENT NUMBER: 138:114951 TITLE: Synthesis of new polymers for photoresist and lithographic printing applications AUTHOR(S): Davidson, K.; El-Attawy, S.; El-Gamal, M.; Khattab, M. A.; El-Demerdach, A. M. CORPORATE SOURCE: The Polymer Centre, Lancaster University, Lancaster, LA1 4YA, UK SOURCE: High Performance Polymers (2002), 14(1), 3-15 CODEN: HPPOEX; ISSN: 0954-0083 PUBLISHER: Sage Publications DOCUMENT TYPE: Journal LANGUAGE: English Lithog. resist materials based on copolymers and/or terpolymers have been synthesized. These materials are comprised of one component to induce water solubility, such as N-vinylpyrrolidinone (NVP) or N, N-di-methylacrylamide (DMAC); and another material to give the photoactive response, in this case allyl glycidyl ether (AGE) or glycidyl methacrylate (GMA). Copolymers and terpolymers of various compns. have been prepared by free radical copolymn. Cationically initiated photocrosslinking was induced using mixed arylsulfonium hexafluoroantimonate (MAS+-SbF6-) as a photoacid generating (PAG) species. 75-59-2, Tetramethylammonium hydroxide RL: NUU (Other use, unclassified); USES (Uses)

(developer; lithog. characterization of allyl glycidyl ether copolymers

with water soluble monomers for photoresist applications)

Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

75-59-2 CAPLUS

RN

• OH -

RN 282088-61-3 CAPLUS

CN 2-Propenamide, N,N-dimethyl-, polymer with [(2-propenyloxy)methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7 CMF C5 H9 N O

$$\begin{matrix} \text{O} \\ || \\ \text{Me}_2 \text{N} - \text{C} - \text{CH} \longrightarrow \text{CH}_2 \end{matrix}$$

CM 2

CRN 106-92-3 CMF C6 H10 O2

RN 488099-29-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with N,N-dimethyl-2-propenamide and [(2-propenyloxy)methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7 CMF C5 H9 N O

CM 2

CRN 106-92-3 CMF C6 H10 O2

$$CH_2-O-CH_2-CH$$
  $CH_2$ 

CM 3

CRN 106-91-2 CMF C7 H10 O3

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST polymer **photoresist** lithog printing plate application; allyl glycidyl ether copolymer chem amplification **photoresist** lithog printing

IT Sulfonium compounds

RL: PRP (Properties)

(arene, photoacid generators; preparation and characterization of allyl glycidyl ether copolymers with water soluble monomers for **photoresist** and lithog. printing applications)

IT Negative photoresists

(chemical amplified; preparation and characterization of allyl glycidyl ether

copolymers with water soluble monomers for **photoresist** and lithog. printing applications)

IT Adhesion, physical

(lithog. characterization of allyl glycidyl ether copolymers with water soluble monomers for **photoresist** applications)

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IT
     Crosslinking
        (photochem.; photoimaging of chemical amplification resists
        based on allyl glycidyl ether copolymers with water soluble monomers)
     IR spectra
IT
     Lithographic plates
     NMR (nuclear magnetic resonance)
     Photoimaging materials
     Polymerization
        (preparation and characterization of allyl glycidyl ether copolymers with
        water soluble monomers for photoresist and lithog, printing
        applications)
IT
     Aromatic compounds
     RL: PRP (Properties)
        (sulfonium, photoacid generators; preparation and characterization of allyl
        glycidyl ether copolymers with water soluble monomers for
        photoresist and lithoq. printing applications)
IT
     75-59-2, Tetramethylammonium hydroxide
     RL: NUU (Other use, unclassified); USES (Uses)
        (developer; lithog. characterization of allyl glycidyl ether copolymers
        with water soluble monomers for photoresist applications)
IT
     78-67-1, AIBN
     RL: CAT (Catalyst use); USES (Uses)
        (preparation and characterization of allyl glycidyl ether copolymers with
        water soluble monomers for photoresist and lithog. printing
        applications)
     110226-18-1P, Allyl glycidyl ether-glycidyl methacrylate-N-vinyl-2-
IT
     pyrrolidinone copolymer 282088-61-3P, Allyl glycidyl
     ether-N, N-dimethylacrylamide copolymer 488099-29-2P, Allyl
     glycidyl ether-N,N-dimethylacrylamide-glycidyl methacrylate copolymer
     RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
        (preparation and characterization of allyl glycidyl ether copolymers with
        water soluble monomers for photoresist and lithog. printing
        applications)
     4270-70-6, Triphenylsulfonium chloride
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of mixed arylsulfonium hexafluoroantimonate photoacid generator
        for photoresists based on allyl glycidyl ether copolymers)
IT
     7440-66-6, Zinc, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (substrate; preparation and characterization of allyl glycidyl ether
        copolymers with water soluble monomers for photoresist and
        lithog. printing applications)
REFERENCE COUNT:
                         17
                               THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L32 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         2002:486496 CAPLUS
DOCUMENT NUMBER:
                         137:54635
                         'Method for forming fine resist patterns
TITLE:
                         with excellent dimensional uniformity
                         Yoshida, Takatsugu; Watanabe, Hisashi
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Matsushita Electric Industrial Co., Ltd., Japan
```

Page 30Walke10722815

SOURCE:

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

20020628

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

KIND DATE

A2

PATENT INFORMATION:

PATENT NO.

APPLICATION NO. DATE

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JP 2000-381895 20001215

JP 2002184673 PRIORITY APPLN. INFO.:

JP 2000-381895

20001215

The method, useful for semiconductor device fabrication, contains forming a 1st resist (chemical amplified resist, preferably) pattern on a semiconductor substrate, applying a 1st layer on the pattern, heating them, and immersing them in an aqueous solution of tetramethylammonium hydroxide (I) for forming a 2nd resist pattern. The 1st layer may contain aqueous layer-forming components and sulfonate salts. The method containing applying a resist on a semiconductor substrate, heating the resist, applying a 2nd layer on it, heating the layer, exposing them via a mask, heating them, developing them for forming a 1st resist pattern, applying a 3rd layer on the pattern, heating them, and immersing them in an aqueous solution of I for forming a 2nd resist pattern, is also claimed.

IT 9003-39-8, Poly(vinylpyrrolidone)

> RL: TEM (Technical or engineered material use); USES (Uses) (3rd layer; photog. for forming fine resist patterns by using aqueous tetramethylammonium hydroxide developers)

RN9003-39-8 CAPLUS

2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME) CN

CM 1

CRN 88-12-0 CMF C6 H9 N O

75-59-2, Tetramethylammonium hydroxide IT

RL: NUU (Other use, unclassified); USES (Uses) (photog. for forming fine resist patterns by using aqueous tetramethylammonium hydroxide developers)

RN75-59-2 CAPLUS

Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME) CN

● OH -

IC ICM H01L021-027

ICS G03F007-039; G03F007-11; G03F007-40

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 76

ST resist pattern formation lithog dimensional uniformity; photoresist development tetramethylammonium hydroxide semiconductor fabrication; chem amplified resist photolithog sulfonate surfactant

IT Photolithography

Photoresists

Semiconductor device fabrication

(photog. for forming fine **resist** patterns by using aqueous tetramethylammonium hydroxide developers)

IT 428864-08-8, TSP 9AEX

RL: TEM (Technical or engineered material use); USES (Uses) (2nd or 3rd layer; photog. for forming fine **resist** patterns by using aqueous tetramethylammonium hydroxide developers)

IT 9003-39-8, Poly(vinylpyrrolidone)

RL: TEM (Technical or engineered material use); USES (Uses)
(3rd layer; photog. for forming fine resist patterns by using aqueous tetramethylammonium hydroxide developers)

IT 75-59-2, Tetramethylammonium hydroxide

RL: NUU (Other use, unclassified); USES (Uses)
(photog. for forming fine **resist** patterns by using aqueous tetramethylammonium hydroxide developers)

IT 438589-81-2, PEK 112A4

RL: TEM (Technical or engineered material use); USES (Uses) (photog. for forming fine **resist** patterns by using aqueous tetramethylammonium hydroxide developers)

IT 29457-76-9, 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compound with 2-aminoethanol (1:1)

RL: TEM (Technical or engineered material use); USES (Uses) (surfactant, 3rd layer; photog. for forming fine resist patterns by using aqueous tetramethylammonium hydroxide developers)

L32 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:332093 CAPLUS

DOCUMENT NUMBER:

136:345862

TITLE:

Absorption agents for hygienic materials with a high

INVENTOR(S):

swelling capacity reduced tendency to cake Jonas, Gerd; Mertens, Richard; Frank, Markus

PATENT ASSIGNEE(S):

Stockhausen Gmbh & Co. Kq, Germany

SOURCE:

PCT Int. Appl., 48 pp.

DOCUMENT TYPE:

Patent

CODEN: PIXXD2

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
     ______
                                         -----
                                                         -----
    WO 2002034384
                    A2
                           20020502
                                        WO 2001-EP12315 20011025
    WO 2002034384
                     A3
                           20020718
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
            US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                       DE 2000-10052966 20001025
    DE 10052966
                     A1
                          20020502
    AU 2002021743
                      A5
                           20020506
                                        AU 2002-21743
                                                         20011025
    EP 1335756
                     A2
                          20030820
                                        EP 2001-988622
                                                         20011025
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    BR 2001014916
                     Α
                           20031223
                                         BR 2001-14916
                                                         20011025
    JP 2004512165
                      T2
                          20040422
                                         JP 2002-537425
                                                         20011025
PRIORITY APPLN. INFO.:
                                      DE 2000-10052966 A 20001025
                                      WO 2001-EP12315 W 20011025
```

AB The invention relates to absorption agents with a high swelling capacity, which have a reduced tendency to cake in the presence of high air humidity and/or high temps. A swellable polymer is coated with a non-ionic, nitrogen-containing tenside and optionally, a Lewis acid, and caused to react by heating. The superabsorbent polymers are produced and used in hygiene articles and in tech. applications. They further provide unchanged water retention capacities, define retention and retention speed of water or aqueous liqs., specifically body fluids. Thus a polymer powder was prepared from acrylic acid, PEG300-diacrylate and allyloxypolyethyleneglycol acrylic acid ester in sodium hydroxide solution; the powder was mixed with anticaking substances. Properties, e.g. anticaking and absorption capacities were measured.

IT 104-15-4, p-Toluene sulfonic acid, biological studies
52880-34-9

RL: NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(absorption agents with high swelling capacity and with reduced tendency to cake)

RN 104-15-4 CAPLUS

CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)

RN 52880-34-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha,\alpha'$ -[[(1-oxoundecyl)imino]di-2,1-ethanediyl]bis[ $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-B

IC ICM B01J020-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

ST absorbent swelling anticaking agent hygienic pad

IT Absorbents

Agglomeration

Agglomeration preventers

Body fluid

Diapers

Heating

Superabsorbents

Surfactants

Swelling, physical

(absorption agents with high swelling capacity and with reduced tendency to cake)

IT Acrylic polymers, biological studies

Lewis acids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (absorption agents with high swelling capacity and with reduced tendency to cake)

IT Amides, biological studies

RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(coco, N,N-bis(hydroxyethyl), Comperlan COD; absorption agents with high swelling capacity and with reduced tendency to cake)

IT Amides, biological studies

RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(coco, N-(hydroxyethyl), Comperlan 100; absorption agents with high swelling capacity and with reduced tendency to cake)

IT Medical goods

(hygienic materials; absorption agents with high swelling capacity and with reduced tendency to cake)

IT Medical goods

(pads; absorption agents with high swelling capacity and with reduced tendency to cake)

IT Amines, biological studies

RL: NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tallow alkyl; absorption agents with high swelling capacity and with reduced tendency to cake)

IT Medical goods

(tampons; absorption agents with high swelling capacity and with reduced tendency to cake)

IT 31017-83-1, Marlazin L 10

RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Marlazin L 10; absorption agents with high swelling capacity and with reduced tendency to cake)

IT 26635-93-8, Marlazin OL 20

RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Marlazin OL 20; absorption agents with high swelling capacity and with reduced tendency to cake)

IT 26027-37-2, Serdox NXC 3

RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Serdox NXC 3, Serdox NXC 6, Serdox NXC 14; absorption agents with high swelling capacity and with reduced tendency to cake)

IT 26635-92-7, Stokomin S 10

RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Stokomin S 10; absorption agents with high swelling capacity and with reduced tendency to cake)

IT 2997-92-4, AAPH 7775-27-1, Sodium peroxydisulfate

RL: CAT (Catalyst use); USES (Uses)

(absorption agents with high swelling capacity and with reduced tendency to cake)

TT 50-21-5, Lactic acid, biological studies 65-85-0, Benzoic acid, biological studies 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-09-4, Propionic acid, biological studies 88-20-0, o-Toluene sulfonic acid 88-99-3, Phthalic acid, biological studies 93-83-4, Oleic acid diethanolamide 98-11-3, Benzene-sulfonic acid, biological studies 104-15-4, p-Toluene sulfonic acid, biological studies 107-92-6, Butyric acid, biological

109-76-2D, 1,3-Propanediamine, tallow derivs. 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 111-05-7, Oleic acid isopropanolamide 141-82-2, Malonic acid, biological studies 144-62-7, Oxalic acid, biological studies 526-83-0, Tartaric acid 617-97-0, m-Toluene sulfonic acid 1066-51-9, Aminomethane phosphonic 7647-01-0, Hydrogen chloride, biological studies Phosphoric acid, biological studies 7664-93-9, Sulfuric acid, biological 7697-37-2, Nitric acid, biological studies 10035-10-6, Hydrogen bromide, biological studies 13881-91-9, Aminomethane sulfonic 52725-64-1 **52880-34-9** 56863-02-6, Linolic acid acid diethanolamide

RL: NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(absorption agents with high swelling capacity and with reduced tendency to cake)

IT 328061-16-1P 418759-52-1P

> RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(absorption agents with high swelling capacity and with reduced tendency to cake)

IT 120-40-1, Comperlan LD 9003-01-4, Polyacrylic acid RL: PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (absorption agents with high swelling capacity and with reduced tendency to cake)

L32 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:71788 CAPLUS

DOCUMENT NUMBER:

136:139647

TITLE:

Multi-layer reaction mixtures and apparatuses for

delivering a volatile component via a controlled

exothermic reaction

INVENTOR(S):

Li, Yu-Jun; Mao, Mark Hsiang-Kuen; Tamura, Haruo; Hu,

Hsin-Yuan

PATENT ASSIGNEE(S):

The Procter & Gamble Company, USA

SOURCE:

PCT Int. Appl., 36 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KI	MD :	DATE			A	PPLI	CATIO	N MC	ο.	DATE					
					<b></b>			-										
WO 2002005640			A.	A1 20020124			WO 2000-US19081			81	20000713							
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,
			CN,	CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EE,	EE,	ES,	FI,	FI,
			GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,
			KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SK,	SL,	TJ.	TM.

TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,

MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

**A**1 20030409

EP 2000-950328 20000713

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2004503669 T220040205

JP 2002-511590 20000713

US 2003105192 A1 20030605 US 2003-340993 20030113 PRIORITY APPLN. INFO.: WO 2000-US19081 W 20000713

Multilayer reaction mixts. that include exothermic generating particles having a water soluble coating encasing a portion of the particles, a volatile component and, optionally, a buffer, an aqueous solution or both are disclosed. At least two layers of the reaction mixture contain exothermic generating particles and at least one layer of the reaction mixture contains a portion of the exothermic generating particles suspended in a gel that includes the water soluble coating. These multilayer reaction mixts. are especially suited to generate heat in a controllable manner, so that volatile components can be controllably released to the surrounding environment. Apparatus and methods using these multilayer reaction mixts. are also disclosed.

IT 104-15-4, Toluenesulfonic acid, uses 9003-39-8,

Polyvinylpyrrolidone

RL: MOA (Modifier or additive use); USES (Uses)

(multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

RN 104-15-4 CAPLUS

Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME) CN

RN 9003-39-8 CAPLUS

2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME) CN

CM 1

CRN 88-12-0

CMF C6 H9 N O

IC ICM A01N025-20

ICS A61M011-04; A01G013-06

CC 62-5 (Essential Oils and Cosmetics)
Section cross-reference(s): 59

ST air fragrance insecticide exothermic reaction

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(Cauout; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(Costus; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(Labdanum; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(Salvia; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(Verbena; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Waxes

RL: MOA (Modifier or additive use); USES (Uses)

(ambergris; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(bergamot; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Vinyl compounds, uses

RL: MOA (Modifier or additive use); USES (Uses)

(carboxy-containing, polymers; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction

such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(chamomile, German; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Musks

(civet; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(clove; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(eucalyptus; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Genista

Jasminum

Mimosa

Narcissus

Rose (Rosa)

(exts.; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(lavender; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)

(lemon; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

IT Acaricides

Air conditioning

Antibacterial agents

Chemiluminescent substances

Citronella (genus)

Deodorants

Disinfectants

Dyes

Exothermic reaction

Fluorescent substances

Fumigants

Insect repellents

Insecticides

Musks

TΤ

IT

TΤ

IT

IT

Page 39Walke10722815 Odor and Odorous substances Pearlescent pigments Perfumes Pesticides Volatile substances (multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides) Acrylic polymers, uses Albumins, uses Bentonite, uses Caseins, uses Collagens, uses Gelatins, uses Hydrides Hydroxides (inorganic) Oxides (inorganic), uses Polymers, uses Polyoxyalkylenes, uses RL: MOA (Modifier or additive use); USES (Uses) (multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides) Liquids (oils, castreum; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides) Resins RL: MOA (Modifier or additive use); USES (Uses) (olibanum; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides) Essential oils RL: MOA (Modifier or additive use); USES (Uses) (peppermint; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides) Vinyl compounds, uses RL: MOA (Modifier or additive use); USES (Uses) (polymers; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides) Essential oils RL: MOA (Modifier or additive use); USES (Uses) (rosemary; multilayer reaction mixts. and apparatuses for delivering

IT

volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

ΙT Essential oils

> RL: MOA (Modifier or additive use); USES (Uses) (sage, Salvia officinalis; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

#### IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)
(sandalwood; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

### IT Daucus carota

(seed extract; multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

## IT Polyphosphoric acids

RL: MOA (Modifier or additive use); USES (Uses)
(sodium salts; multilayer reaction mixts. and apparatuses for
delivering volatile component via controlled exothermic reaction such
as air treatment with perfumes and insecticides)

## IT Essential oils

RL: MOA (Modifier or additive use); USES (Uses)
(sour orange neroli; multilayer reaction mixts. and apparatuses for
delivering volatile component via controlled exothermic reaction such
as air treatment with perfumes and insecticides)

IT50-21-5, Lactic acid, uses 50-81-7, Ascorbic acid, uses Adenosinetriphosphate, uses 56-86-0, Glutamic acid, uses 59-67-6, Nicotinic acid, uses 60-12-8, β.-Phenylethyl alcohol 64-18-6, Formic acid, uses 64-19-7, Acetic acid, uses 65-85-0, Benzoic acid, 69-72-7, Salicylic acid, uses 76-22-2, Camphor 77-92-9, Citric acid, uses 78-70-6 79-09-4, Propanoic acid, uses 79-14-1, Glycolic acid, uses 80-69-3, Tartronic acid 87-69-4, Tartaric acid, uses 88-99-3, Phthalic acid, uses 89-78-1, Menthol 90-64-2, Mandelic acid 91-20-3D, Naphthalene, derivs. 93-15-2, Methyl eugenol 97-53-0, 97-54-1 98-11-3, Benzenesulfonic acid, uses 98-79-3, Pyrrolidone carboxylic acid 98-86-2, Acetophenone, uses 100-21-0, Terephthalic acid, uses 100-51-6, Benzyl alcohol, uses  $\alpha$ .-Hexylcinnamic aldehyde 103-36-6, Ethyl cinnamate 103-54-8, Cinnamyl acetate 103-82-2, Phenylacetic acid, uses 103-95-7, Cyclamen aldehyde 104-15-4, Toluenesulfonic acid, uses 104-46-1, 104-54-1, Cinnamyl alcohol 104-67-6, .γ.-Undecalactone Anethole 105-54-4, Ethyl butyrate 106-23-0 106-24-1, Geraniol Hydroxycitronellal 107-92-6, Butyric acid, uses 109-52-4, Valeric acid, uses 110-15-6, Succinic acid, uses 110-16-7, Maleic acid, uses 110-17-8, Fumaric acid, uses 110-38-3, Ethyl caprate 110-44-1, Sorbic 110-94-1, Glutaric acid 111-16-0, Pimelic acid 115-95-7, Linalyl acetate 116-02-9, 3,3,5-Trimethylcyclohexanol 120-72-9, Indole, uses 121-32-4, Ethyl vanillin 121-33-5, Vanillin 121-91-5, Isophthalic acid, uses 122-00-9, p-Methylacetophenone 122-03-2, Cumin aldehyde 122-40-7 122-63-4, Benzyl propionate 123-92-2, Isoamyl acetate 124-04-9, Adipic acid, uses 134-20-3, Methyl anthranilate 140-11-4, Benzyl acetate 141-82-2, Malonic acid, uses 144-62-7, Oxalic 149-91-7, Gallic acid, uses 473-81-4, Glyceric acid acid, uses 487-79-6, Kainic acid 507-70-0, Borneol 526-95-4, Gluconic acid 528-44-9, Trimellitic acid 552-63-6, Tropic acid 600-15-7,  $\alpha$ -Hydroxybutyric acid 621-82-9, Cinnamic acid, uses 627-83-8, Ethyleneglycol distearate 1304-56-9, Beryllium oxide, uses 1305-78-8, Calcium oxide, uses 1327-43-1, Aluminum magnesium silicate 1330-43-4,

Sodium tetraborate 1337-83-3, Undecenal 1405-86-3, Glycyrrhizic acid 2466-09-3, Pyrophosphoric acid 5329-14-6, Sulfamic acid 5392-40-5, Citral 6915-15-7, Malic acid 7320-34-5, Potassium pyrophosphate 7429-90-5D, Aluminum, oxides, hydroxides, or hydrides 7439-89-6D, Iron, oxides, hydroxides, or hydrides 7439-93-2D, Lithium, oxides, hydroxides, or hydrides 7439-95-4D, Magnesium, oxides, hydroxides, or hydrides 7440-09-7D, Potassium, oxides, hydroxides, or hydrides 7440-23-5D, Sodium, oxides, hydroxides, or hydrides 7440-41-7D, Beryllium, oxides, hydroxides, or hydrides 7440-50-8D, Copper, oxides, hydroxides, or hydrides 7440-66-6D, Zinc, oxides, hydroxides, or hydrides 7440-70-2D, Calcium, oxides, hydroxides, or hydrides 7487-88-9, Magnesium sulfate, uses 7558-80-7, Sodium dihydrogen phosphate 7601-54-9, Sodium phosphate 7631-86-9, Silica, 7631-90-5, Sodium hydrogen sulfite 7664-38-2, Orthophosphoric acid, uses 7722-88-5, Sodium pyrophosphate 7727-15-3, Aluminum bromide 7773-03-7, Potassium hydrogen sulfite 7778-77-0, Potassium dihydrogen phosphate 7784-23-8, Aluminum iodide 7786-30-3, Magnesium chloride, 7789-78-8, Calcium hydride 9000-01-5, Gum arabic Carrageenan 9000-30-0, Gum quar 9000-36-6, Karaya gum 9000-40-2, 9000-65-1, Gum tragacanth Carob-seed gum 9000-69-5, Pectin 9002-89-5, Polyvinyl alcohol 9002-18-0, Agar 9002-98-6 9003-04-7, Sodium polyacrylate 9003-05-8, Poly acrylamide 9003-09-2, Poly (vinyl methyl ether) 9003-32-1, Poly ethylacrylate 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Sodium carboxymethylcellulose 9004-34-6, Cellulose, uses 9004-54-0, Dextran, uses 9004-57-3, Ethylcellulose 9004-62-0, Hydroxyethylcellulose 9004-64-2, Hydroxypropylcellulose 9004-65-3, Methylhydroxypropylcellulose 9004-67-5, Methylcellulose 9004-70-0, Nitrocellulose 9005-22-5, Sodium cellulose sulfate 9005-25-8, Starch, uses 9005-32-7, Alginic acid 9005-37-2 9005-38-3, Sodium alginate 9011-85-2, Quince seed gum 9014-37-3 9037-55-2, Galactan 9057-02-7, Pullulan 9057-06-1, Carboxymethyl starch 11138-66-2, XanthanGum 12136-45-7, Potassium oxide, uses 12173-47-6, Hectorite 13327-32-7, Beryllium hydroxide 16853-85-3, Lithium aluminum hydride 25763-86-4, Disulfurous acid, monosodium salt 36729-58-5, Decanol 50984-52-6, Anisaldehyde 53563-67-0D, derivs. 57856-81-2, Allylcaprate 61970-00-1, Firefly 111937-70-3, Hydroxyacrylic acid luciferase 141533-39-3 392247-40-4 RL: MOA (Modifier or additive use); USES (Uses) (multilayer reaction mixts. and apparatuses for delivering volatile component via controlled exothermic reaction such as air treatment with perfumes and insecticides)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:597783 CAPLUS

DOCUMENT NUMBER:

135:170788

TITLE:

Acrylic enteric coating compositions

INVENTOR(S):

Chittamuru, Ramireddy; Reyes, George; Farrell, Thomas

P.; Vesey, Charles F.; Mehra, Dev K.; Petereit,

Hans-ulrich; Lehmann, Klaus

PATENT ASSIGNEE(S):

Bpsi Holdings, Inc., USA; Rohm GmbH Chemische Fabrik

SOURCE:

PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                      KIND DATE
                                         APPLICATION NO.
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     WO 2001058429
                      A1
                            20010816
                                          WO 2001-US4167
                                                           20010209
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             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW,
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                                        EP 2001-910485
                                                           20010209
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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                                        BR 2001-8145
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                                          JP 2001-557540
                                                          20010209
     NO 2002003784
                           20020902
                                          NO 2002-3784
                                                          20020809
PRIORITY APPLN. INFO.:
                                       US 2000-501866 A 20000210
                                       US 2001-766859
                                                       A 20010119
                                       WO 2001-US4167
                                                       W 20010209
AΒ
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- A non-toxic, edible, enteric film coating, dry powder composition for use in making an aqueous enteric suspension which may be used in coating pharmaceutical tablets comprises: a) an acrylic resin, said resin comprising i) from 20 to 85 percent by weight of at least one alkyl acrylate or alkyl methacrylate moiety, ii) from 80 to 15 percent by weight of at least one vinyl or vinylidene moiety having a carboxylic acid group capable of salt formation, and iii) from 0 to 30 percent by weight of at least one other vinyl or vinylidene moiety copolymerizable with i) and ii), b) an alkalizing agent capable of reacting with the acrylic resin such that, after reaction, 0.1 to 10 mol percent of the acidic groups in la-ii) are present in the salt form, and c) detackifier. An example of the acrylic compound used in coating was Eudragit L100-55.
- 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 9003-39-8

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(acrylic enteric coating compns.)

RN1310-58-3 CAPLUS

CNPotassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)

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K-OH
RN
     1310-73-2 CAPLUS
 CN
     Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
Na-OH
RN
     9003-39-8 CAPLUS
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 88-12-0
     CMF C6 H9 N O
  сн сн2
IC
     ICM A61K009-20
     ICS A61K009-30; A61K047-06; B05D003-00; C08K005-34; C08K005-10
CC
     63-6 (Pharmaceuticals)
ST
     enteric coating powder suspension acrylic
IT
     Flours and Meals
        (Amorphophallus rivieri flour; acrylic enteric coating
        compns.)
IT
     Coating materials
     Dyes
     Pigments, nonbiological
     Plasticizers
     Surfactants
        (acrylic enteric coating compns.)
ΙT
     Carbon black, biological studies
     Castor oil
     Kaolin, biological studies
     Polyoxyalkylenes, biological studies
     RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (acrylic enteric coating compns.)
IT
    Drug delivery systems
        (enteric; acrylic enteric coating compns.)
IT
     Amorphophallus rivieri
        (flour; acrylic enteric coating compns.)
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IT Drug delivery systems (suspensions; acrylic enteric coating compns.) IT Drug delivery systems (tablets; acrylic enteric coating compns.) 56-81-5, Glycerol, biological studies 71-52-3, Bicarbonate, biological IT 77-89-4, Acetyl triethyl citrate 77-93-0, Triethyl citrate 83-88-5, Riboflavin, biological studies 84-66-2, Diethyl phthalate 102-76-1, Glyceryl triacetate 109-43-3, Dibutyl sebacate Sodium lauryl sulfate, biological studies 458-37-7, Curcumin Ammonium carbonate 546-93-0, Magnesium carbonate 577-11-7, Dioctyl sodium sulfosuccinate 1066-33-7, Ammonium bicarbonate 1305-62-0, Calcium hydroxide, biological studies 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesium oxide, biological studies 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 1332-37-2, Iron oxide, biological studies 1390-65-4, Carmine 1393-63-1, Annatto 3812-32-6, Carbonate, biological 7631-86-9, Silica, biological studies 9000-07-1, Carrageenan 9003-11-6, Oxirane, polymer with methyloxirane 9003-39-8, Pvp 9004-32-4, sodium CM-cellulose 9004-62-0, Hydroxyethyl cellulose 9004-65-3, Hpmc 9005-37-2, Propylene glycol alginate 9005-38-3, Sodium alginate 9005-65-6, polysorbate 80 11138-66-2, Xanthan gum 13463-67-7, Titania, biological studies 14265-44-2, Phosphate, biological studies 14807-96-6, Talc, biological studies 31566-31-1, Glycerol monostearate 144892-73-9, Aluminum hydrate RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (acrylic enteric coating compns.) 25212-88-8, eudragit L100-55 TT RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (acrylic enteric coating compns.) REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L32 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2001:380699 CAPLUS DOCUMENT NUMBER: 135:6958 TITLE: Composition and process for coating tin oxide-based transparent conductive film INVENTOR(S): Niume, Kazuma; Utida, Takasi; Kimura, Masateru PATENT ASSIGNEE(S): Toyo Gosei Kogyo Co., Ltd., Japan SOURCE: PCT Int. Appl., 24 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036544	<b>A1</b>	20010525	WO 2000-JP8095	20001117

W: CA, KR, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE, TR JP 2001210156 A2 2

20010803

JP 2000-344339 20001110

CA 2360442

AA 20010525

CA 2000-2360442 20001117

EP 1152040

A1 20011107

EP 2000-976299 20001117

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.:

JP 1999-326634

A 19991117

JP 2000-344339 WO 2000-JP8095 A 20001110 W 20001117

AB Title composition is prepared by dissolving an aqueous polar polymer [e.g., poly(vinyl alc.)] in a water solution mainly containing tin oxide in the presence

of  $\geq 1$  compound selected from ammonia and water-soluble amines. Thus, a transparent tin oxide film was obtained by dip-coating a composition at a speed of 5 cm/min on a glass substrate, drying at 100° for 30 min, and baking at 600° for 1 h.

IT 75-59-2, Tetramethylammonium hydroxide

RL: NUU (Other use, unclassified); USES (Uses)

(preparation of **composition** for **coating** tin oxide-based transparent conductive film)

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_{3} \\ | \\ | \\ \text{CH}_{3} \\ | \\ \text{CH}_{3} \end{array}$$

OH-

IT 26793-34-0, Polydimethylacrylamide

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(preparation of  ${\bf composition}$  for  ${\bf coating}$  tin oxide-based transparent conductive film)

RN 26793-34-0 CAPLUS

CN 2-Propenamide, N,N-dimethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O

```
Me<sub>2</sub>N-C-CH-CH<sub>2</sub>
 IC
      ICM C09D001-00
      ICS C09D005-24; C03C017-25; C01G019-02; G02F001-1343; H01B013-00;
           H01B005-14
 CC
      42-10 (Coatings, Inks, and Related Products)
      Section cross-reference(s): 74
      tin oxide ammonia polyvinyl alc transparent conductive film
 ST
 IT
      Transparent films
         (elec. conductive; preparation of composition for coating tin
         oxide-based transparent conductive film)
 IT
      Electric conductors
         (films, transparent; preparation of composition for coating
         tin oxide-based transparent conductive film)
 TΤ
      Coating process
         (preparation of composition for coating tin oxide-based
         transparent conductive film)
IT
     Amines, uses
     RL: NUU (Other use, unclassified); USES (Uses)
         (preparation of composition for coating tin oxide-based
        transparent conductive film)
ΙŢ
     18282-10-5P, Tin oxide (SnO2)
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
IT
     7440-03-1, Niobium, uses
                                7440-36-0, Antimony, uses
                                                             7440-69-9, Bismuth,
           7782-41-4, Fluorine, uses 10361-43-0, Bismuth hydroxide
     12710-38-2, Niobium hydroxide 152761-81-4, Antimony hydroxide
     RL: MOA (Modifier or additive use); USES (Uses)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
IT
     75-50-3, Trimethylamine, uses 75-59-2, Tetramethylammonium
                 109-89-7, Diethylamine, uses
     hydroxide
                                               121-44-8, Triethylamine, uses
     124-40-3, Dimethylamine, uses 7664-41-7, Ammonia, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
IT
     9002-89-5, Polyvinyl alcohol
     RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
     engineered material use); USES (Uses)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
IT
     9003-05-8, Polyacrylamide
                                 9004-32-4, CMC
                                                  9004-62-0
                                                               9004-64-2
     26793-34-0, Polydimethylacrylamide
                                          28408-65-3,
     Poly(N-vinylacetamide)
                             28902-82-1, Polyacryloylmorpholine
                                                                    72018-12-3,
     Poly(N-vinylformamide)
    RL: POF (Polymer in formulation); TEM (Technical or engineered material
```

```
use); USES (Uses)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
     7787-60-2, Bismuth chloride (BiCl3)
                                         10025-91-9, Antimony chloride
             10026-06-9, Tin chloride (SnCl4) pentahydrate
     (SbCl3)
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
IT
     39311-68-7, Stannic acid
     RL: TEM (Technical or engineered material use); USES (Uses)
        (preparation of composition for coating tin oxide-based
        transparent conductive film)
REFERENCE COUNT:
                              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                        6
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L32 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                     2001:360297 CAPLUS
DOCUMENT NUMBER:
                       134:346483
TITLE:
                        Composition for antireflection
                       coating on photoresist film
INVENTOR(S):
                        Takano, Yusuke; Tanaka, Hatsuyuki; Lee, Dong Han
PATENT ASSIGNEE(S):
                       Clariant International Ltd., Switz.
SOURCE:
                        PCT Int. Appl., 17 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                 KIND DATE APPLICATION NO. DATE
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                          -----
                                        -----
     WO 2001035167
                    A1
                           20010517
                                        WO 2000-JP7851
                                                         20001108
        W: CN, KR, SG, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE, TR
    JP 2001142221
                          20010525
                    A2
                                       JP 1999-319888
                                                         19991110
                          20011114
    EP 1154324
                    A1
                                        EP 2000-974831
                                                         20001108
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
    US 6692892
                     B1
                          20040217
                                         US 2001-889184
                                                         20010710
PRIORITY APPLN. INFO.:
                                      JP 1999-319888 A 19991110
                                      WO 2000-JP7851 W 20001108
    A composition for antireflection coating comprising (a)
AR
    poly(acrylic acid), (b) poly(vinyl pyrrolidone), (c) CnF2n+1COOH (n =
    3-11), and (d) tetramethylammonium hydroxide is applied to a
    photoresist film to form an antireflection film. The coated
    photoresist film is exposed to light and developed to obtain a
    resist pattern of a satisfactory shape free from T-tops, round
IT
    75-59-2, Tetramethylammonium hydroxide 9003-39-8,
```

RL: TEM (Technical or engineered material use); USES (Uses)

Poly(vinyl pyrrolidone)

```
(in composition for antireflection coating on
        photoresist film)
RN
     75-59-2 CAPLUS
     Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)
CN
   ● OH -
     9003-39-8 CAPLUS
RN
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 88-12-0
     CMF C6 H9 N O
IC
     ICM G03F007-11
     ICS C08L033-02
     74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
     Section cross-reference(s): 42, 73, 76
     antireflection coating compn photoresist
ST
     film photolithog antireflective film
    Antireflective films
IT
     Photolithography
      Photoresists
     Semiconductor device fabrication
        (composition for antireflection coating on
        photoresist film)
IT
    75-59-2, Tetramethylammonium hydroxide 335-67-1,
    Perfluorooctanoic acid
                              9003-01-4, Poly(acrylic acid) 9003-39-8
     , Poly(vinyl pyrrolidone)
    RL: TEM (Technical or engineered material use); USES (Uses)
        (in composition for antireflection coating on
       photoresist film)
```

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:338904 CAPLUS

DOCUMENT NUMBER:

134:335353

TITLE:

Method of producing vertical interconnects between

thin film microelectronic devices and products

comprising such vertical interconnects

INVENTOR(S):

De Leeuw, Dagobert M.; Gelinck, Gerwin H.; Matters,

Marco

PATENT ASSIGNEE(S):

Koninklijke Philips Electronics N.V., Neth.

SOURCE:

PCT Int. Appl., 29 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

D.2 MINISTER			
PATENT NO.	KIND DATE	APPLICATION N	O. DATE
WO 2001033649	A1 20010	510 WO 2000-EP101	60 20001013
W: JP			
RW: AT, B	, CH, CY, DE, I	DK, ES, FI, FR, GB, GR,	IE, IT, LU, MC, NL,
PT, SI			
EP 1145339	A1 20011	017 EP 2000-97277	3 20001013
R: AT, BI	, CH, DE, DK, I	ES, FR, GB, GR, IT, LI,	LU, NL, SE, MC, PT,
IE, S	, LT, LV, FI, I	RO	
JP 2003513475	T2 200304	408 JP 2001-53524	5 20001013
US 6635406	B1 200310	021 US 2000-70451:	9 20001102
PRIORITY APPLN. IN	0.:	EP 1999-203603	A 19991102
		WO 2000-EP10160	W 20001013

The present invention provides a method of photochem. producing a vertical interconnect between a 1st and a 2nd thin-film microelectronic device in a vertical interconnect area which comprises an overlap of a stack of a 1st elec. conducting area, optionally an organic elec. semiconducting area, an organic elec. insulating area comprising adapted photoresist material and a 2nd organic elec. conducting area, in which the organic elec. insulating area is removed within the overlapping area and substituted by an elec. conducting area which is extended from at least the 1st or the 2nd elec. conducting area. The method is useful in the manufacture of electronic devices, preferably integrated circuits, consisting substantially of organic materials.

IT **75-59-2**, AZ726MIF

RL: DEV (Device component use); USES (Uses)
 (developer; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

OH -

IT 9003-39-8, PVP

RL: DEV (Device component use); USES (Uses)
(polymer gate dielec.; method of producing vertical interconnects
between thin film microelectronic devices and products comprising such
vertical interconnects)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IC ICM H01L051-40

ICS H01L051-00; H01L021-768; H01L023-532

CC 76-3 (Electric Phenomena)

Section cross-reference(s): 38

ST vertical interconnect org thin film microelectronic device; photochem photoresist vertical interconnect thin film microelectronic device

IT Azides

RL: NUU (Other use, unclassified); USES (Uses)

(bis-, photoinitiators; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Aminoplasts

RL: NUU (Other use, unclassified); USES (Uses)

(crosslinking agent; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Polyanilines

RL: DEV (Device component use); USES (Uses)

(elec. conductive films; method of producing vertical interconnects between thin film microelectronic devices and products comprising such

vertical interconnects)

## IT Photoresists

UV radiation

(method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Phenolic resins, uses

RL: DEV (Device component use); USES (Uses)

(novolak, polymer gate dielec.; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Dielectric films

Integrated circuits

(organic; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Polymerization catalysts

(photopolymn.; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Phenolic resins, uses

RL: DEV (Device component use); USES (Uses)

(photoresist; method of producing vertical interconnects
between thin film microelectronic devices and products comprising such
vertical interconnects)

IT Polyglutarimides

RL: DEV (Device component use); USES (Uses)

(polymer gate dielec.; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Polymers, uses

RL: DEV (Device component use); USES (Uses)

(polythiophenes, semiconductor in FET; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Poly(arylenealkenylenes)

Polyacenes

Polydiacetylenes

Polyphenyls

RL: DEV (Device component use); USES (Uses)

(semiconductor in FET; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Coating process

(spin; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT Glass, uses

Polyamides, uses

Polyimides, uses

RL: DEV (Device component use); USES (Uses)

(substrate; method of producing vertical interconnects between thin

film microelectronic devices and products comprising such vertical interconnects)

IT Interconnections (electric)

(vias; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT 7440-32-6, Titanium, uses 7440-57-5, Gold, uses

RL: DEV (Device component use); USES (Uses)

(Au/Ti first conductive layer; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT 947-19-3, 1-Hydroxycyclohexylphenylketone

RL: NUU (Other use, unclassified); USES (Uses)
(Irgacure 184, photochem. radical initiator; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT 59269-51-1, Polyvinyl phenol

RL: DEV (Device component use); USES (Uses)
(conductive materials; method of producing vertical interconnects
between thin film microelectronic devices and products comprising such
vertical interconnects)

IT 3089-11-0, Hexamethoxymethylmelamine

RL: NUU (Other use, unclassified); USES (Uses)
 (crosslinking agent; method of producing vertical interconnects between
 thin film microelectronic devices and products comprising such vertical
 interconnects)

IT **75-59-2**, AZ726MIF

RL: DEV (Device component use); USES (Uses) (developer; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

RL: NUU (Other use, unclassified); USES (Uses)
(developer; method of producing vertical interconnects between thin
film microelectronic devices and products comprising such vertical
interconnects)

IT 3144-16-9, Camphorsulfonic acid

RL: NUU (Other use, unclassified); USES (Uses) (dopants; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT 9033-83-4, Polyphenylene 25233-34-5, Polythiophene 96638-49-2,
 Polyphenylenevinylene 126213-51-2, Poly-3,4-ethylenedioxythiophene
 RL: DEV (Device component use); USES (Uses)
 (elec. conductive films; method of producing vertical interconnects
 between thin film microelectronic devices and products comprising such
 vertical interconnects)

IT 109211-15-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of poly(2,5-thienylene vinylene); method of producing vertical interconnects between thin film microelectronic devices and

```
products comprising such vertical interconnects)
IT
     50851-57-5, Poly(styrenesulfonic acid)
     RL: DEV (Device component use); USES (Uses)
         (in colloidal solution for conductive layer formation; method of producing
        vertical interconnects between thin film microelectronic devices and
        products comprising such vertical interconnects)
     25155-30-0, Dodecylbenzenesulfonic acid sodium salt
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (in colloidal solution for conductive layer formation; method of producing
        vertical interconnects between thin film microelectronic devices and
        products comprising such vertical interconnects)
IT
     26498-02-2, Poly(2,5-thienylene vinylene)
                                                  221273-01-4, SU 8 (
     photoresist)
     RL: DEV (Device component use); USES (Uses)
        (method of producing vertical interconnects between thin film
        microelectronic devices and products comprising such vertical
        interconnects)
IT
     319482-70-7, XP SU8
     RL: NUU (Other use, unclassified); USES (Uses)
        (method of producing vertical interconnects between thin film
        microelectronic devices and products comprising such vertical
        interconnects)
     58109-40-3, Diphenyliodonium hexafluoro phosphate
IT
     RL: NUU (Other use, unclassified); USES (Uses)
        (photoinitiator; method of producing vertical interconnects between
        thin film microelectronic devices and products comprising such vertical
        interconnects)
IT
     37181-39-8, Triflate
     RL: NUU (Other use, unclassified); USES (Uses)
        (photoinitiators; method of producing vertical interconnects between
        thin film microelectronic devices and products comprising such vertical
        interconnects)
IT
     9003-35-4, CS 100
                        160903-14-0, OCG-HPR 504
                                                    182576-50-7, AZ6612
     RL: DEV (Device component use); USES (Uses)
        (photoresist; method of producing vertical interconnects
        between thin film microelectronic devices and products comprising such
        vertical interconnects)
IT
     108-78-1, Melamine, uses
     RL: DEV (Device component use); USES (Uses)
        (polymer gate dielec., polymer of; method of producing vertical
        interconnects between thin film microelectronic devices and products
        comprising such vertical interconnects)
IT
     2628-17-3, p-Hydroxystyrene
                                  9002-89-5
                                               9003-31-0, Polyisoprene
                      49717-87-5, 2-Propenoic acid, ion(1-),
     9003-39-8, PVP
    homopolymer, uses
    RL: DEV (Device component use); USES (Uses)
        (polymer gate dielec.; method of producing vertical interconnects
        between thin film microelectronic devices and products comprising such
        vertical interconnects)
    135-48-8, Pentacene
IT
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (semiconductive layer of; method of producing vertical interconnects
```

between thin film microelectronic devices and products comprising such vertical interconnects)

IT 30604-81-0, Polypyrrole 66280-99-7, Poly(thienylene vinylene) 104934-50-1, Poly-3-hexylthiophene

RL: DEV (Device component use); USES (Uses)
(semiconductor in FET; method of producing vertical interconnects
between thin film microelectronic devices and products comprising such
vertical interconnects)

IT 108-39-4, m-Cresol, uses

RL: NUU (Other use, unclassified); USES (Uses)
 (solvent for doping; method of producing vertical interconnects between
 thin film microelectronic devices and products comprising such vertical
 interconnects)

IT 872-50-4, N-Methylpyrrolidone, uses

RL: NUU (Other use, unclassified); USES (Uses)
(solvent for removing nonconducting area; method of producing vertical interconnects between thin film microelectronic devices and products comprising such vertical interconnects)

IT 7631-86-9, Silica, uses

RL: DEV (Device component use); USES (Uses)
(substrate; method of producing vertical interconnects between thin
film microelectronic devices and products comprising such vertical
interconnects)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:98668 CAPLUS

DOCUMENT NUMBER:

134:156352

TITLE:

Photoresist pattern formation, semiconductor

device, and its manufacture by using the method

INVENTOR(S):

Yasuda, Naoki; Toyoshima, Toshiyuki; Ishibashi, Takeo

PATENT ASSIGNEE(S):

Mitsubishi Electric Corp., Japan Jpn. Kokai Tokkyo Koho, 15 pp.

SOURCE:

DOCUMENT TYPE:

Patent

CODEN: JKXXAF

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2001033984 A2 20010209 JP 1999-201611 19990715

PRIORITY APPLN. INFO.: JP 1999-201611 19990715

AB The title pattern formation is carried out by the following steps: (1) exposing neg.-working photoresist film to light and developing, (2) forming an organic film on the resulting 1st pattern, and (3) removing the organic film and part of the 1st pattern for formation of a high-precision and very fine 2nd pattern. Preferably, the organic film is a basic polymer, and the film and part of the 1st pattern is removed by using a dissoln. solution Also claimed are method for manufacture of semiconductor device by using the patterning technique and the resulting

semiconductor device.

IT 75-59-2, Tetramethylammonium hydroxide 9003-39-8,

Polyvinyl pyrrolidone

RL: NUU (Other use, unclassified); USES (Uses)

(fine patterning of neg.-working photoresist by formation of

organic film and its removal with dissoln. solution for semiconductor device fabrication)

75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

RN

OH -

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

CMF C6 H9 N O

IC ICM G03F007-40

ICS G03F007-038; H01L021-027

CC 76-3 (Electric Phenomena)

Section cross-reference(s): 74

ST neg **photoresist** pattern formation semiconductor device fabrication

IT Negative photoresists

Semiconductor device fabrication

Semiconductor memory devices

(fine patterning of neg.-working **photoresist** by formation of organic film and its removal with dissoln. solution for semiconductor device

fabrication)

IT Polyoxyalkylenes, uses

Polyvinyl acetals

# Page 56Walke10722815

RL: NUU (Other use, unclassified); USES (Uses) (fine patterning of neg.-working photoresist by formation of organic film and its removal with dissoln. solution for semiconductor device fabrication) Polyesters, uses TТ RL: NUU (Other use, unclassified); USES (Uses) (hydroxy-terminated; fine patterning of neg.-working photoresist by formation of organic film and its removal with dissoln. solution for semiconductor device fabrication) **75-59-2**, Tetramethylammonium hydroxide TT 141-43-5, Monoethanolamine, uses 872-50-4, N-Methylpyrrolidone, uses Polyvinyl alcohol 9002-98-6 9003-01-4, Acrylic acid homopolymer 9003-05-8, Polyacrylamide 9003-19-4, Polyvinyl ether 9003-39-8 , Polyvinyl pyrrolidone 25322-68-3, Polyethylene oxide 26336-38-9, Polyvinylamine 34540-03-9, Polyacrylimide RL: NUU (Other use, unclassified); USES (Uses) (fine patterning of neg.-working photoresist by formation of organic film and its removal with dissoln. solution for semiconductor device fabrication) L32 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2000:905577 CAPLUS DOCUMENT NUMBER: 134:61531 TITLE: Stabilized compositions containing benzimidazole compounds or their alkali metal salts and their enteric coated preparations INVENTOR(S): Ukai, Koji; Ichikawa, Masaki; Kato, Takashi; Sugatani, Yukiko; Suzuki, Yasuyuki; Aoki, Shigeru; Kato, Akiyoshi; Kawamura, Masao; Fujioka, Masaru PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp. CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ---------------JP 2000355540 A2 20001226 JP 1999-110462 19990419 PRIORITY APPLN. INFO.: JP 1998-109288 A 19980420 JP 1999-105797 A 19990413 OTHER SOURCE(S): MARPAT 134:61531 GI

1

AB Compns. containing benzimidazole compds. I (R1, R2 = H, OMe, OCHF2; R3 = H, Na; R4-R6 = H, Me, OMe, methoxypropoxy, trifluoroethoxy) or their alkali metal salts and ≥1 selected from Na2CO3, K2CO3, NaOH, KOH, aminoalkyl methacrylate copolymer E, arginine aspartate, hydroxypropyl cellulose, and crospovidone are claimed. Also claimed are enteric coated prepns. manufactured by coating core tablets comprising the composition with enteric coating optionally via interlayer. I are stabilized in the compns. and prepns. and prevented from discoloration. A mixture of rabeprazole Na 10, Na2CO3 10, and mannitol 100 g was granulated while spraying a EtOH solution of 2.5 g hydroxypropyl cellulose, and the granules were mixed with Ca stearate and compressed to give tablets. The tablets were spray-coated with a H2O/EtOH solution containing

hydroxypropyl Me cellulose phthalate to give enteric-coated tablets.

IT 1310-58-3, Potassium hydroxide, biological studies

1310-73-2, Sodium hydroxide, biological studies 9003-39-8

, Crospovidone

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(stabilized compns. of benzimidazole proton pump inhibitors containing specific stabilizers and enteric-coated tablets thereof)

RN 1310-58-3 CAPLUS

CN Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)

K-OH

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

 $Na^-OH$ 

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

CMF C6 H9 N O

```
IC
     ICM A61K031-4439
     ICS A61K009-28; A61P001-04; A61P043-00; A61K047-02; A61K047-30;
          A61K047-38; C07D401-12
CC
     63-6 (Pharmaceuticals)
     benzimidazole proton pump inhibitor stabilization sodium carbonate;
ST
     enteric coating benzimidazole proton pump inhibitor stabilizer
IT
     Antioxidants
     Antiulcer agents
     Discoloration prevention agents
     Stabilizing agents
        (stabilized compns. of benzimidazole proton pump inhibitors containing
        specific stabilizers and enteric-coated tablets thereof)
IT
     Drug delivery systems
        (tablets, enteric-coated; stabilized compns. of
        benzimidazole proton pump inhibitors containing specific stabilizers and
        enteric-coated tablets thereof)
IT
     7757-83-7, Sodium sulfite
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antioxidant; stabilized compns. of benzimidazole proton pump
        inhibitors containing specific stabilizers and enteric-coated tablets
        thereof)
IT
     9004-65-3, Hydroxypropyl methyl cellulose
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (moisture-proof layer; stabilized compns. of benzimidazole proton pump
        inhibitors containing specific stabilizers and enteric-coated tablets
        thereof)
IT
     497-19-8, Sodium carbonate, biological studies
                                                      584-08-7, Potassium
     carbonate 1310-58-3, Potassium hydroxide, biological studies
     1310-73-2, Sodium hydroxide, biological studies
                                                       7675-83-4,
     Arginine aspartate 9003-39-8, Crospovidone
                                                 9004-64-2,
     Hydroxypropyl cellulose 24938-16-7, Eudragit E
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (stabilized compns. of benzimidazole proton pump inhibitors containing
        specific stabilizers and enteric-coated tablets thereof)
IT
     9050-31-1, Hydroxypropyl methyl cellulose phthalate
                                                           73590-58-6.
                 76633-00-6, Kollidon CL 102625-70-7, Pantoprazole
    Omeprazole
     103577-45-3, Lansoprazole
                               117976-89-3, Rabeprazole 117976-90-6,
```

Rabeprazole sodium 185702-31-2, Kollidon CLM

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(stabilized compns. of benzimidazole proton pump inhibitors containing

specific stabilizers and enteric-coated tablets thereof)

L32 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:677395 CAPLUS

DOCUMENT NUMBER:

133:256826

TITLE:

Coating agents for oral formulations containing

HMG-CoA reductase inhibitors

INVENTOR(S):

Usui, Fusao; Yada, Shuichi; Kawabata, Kiyoshi

PATENT ASSIGNEE(S):

Sankyo Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 7 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000264846	A2	20000926	JP 1999-70089	19990316
PRIORITY APPLN. INFO.	:		JP 1999-70089	19990316

Oral prepns. containing HMG-CoA reductase inhibitors, basic compds., and AB water-soluble polymers, are coated with a composition containing hydroxypropyl Me cellulose acetate succinate and plasticizers, preferably tri-Et citrate. This invention coated preparation allows maintaining of drug blood concentration and prevents isomerization of the drug, e.g. pravastatin. Tablets were formulated containing pravastatin Na, lactose, Crospovidone, Mg aluminate metasilicate, hydroxypropyl cellulose, and Mg stearate. The tablets were coated with a solution containing hydroxypropyl Me cellulose

succinate 12.5, tri-Et citrate 2.5, and 70% ethanolic aqueous solution 85

1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 9003-39-8 , PVP

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (coating agents for oral formulations containing HMG-CoA reductase inhibitors)

RN1310-58-3 CAPLUS

CNPotassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)

K-OH

RN1310-73-2 CAPLUS

Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME) CN

Na-OH

RN 9003-39-8 CAPLUS CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

CH CH<sub>2</sub>

IC ICM A61K045-00

ICS A61K009-36; A61K031-00; A61K031-22; A61K047-02; A61K047-38

CC 63-6 (Pharmaceuticals)

ST tablet HMG CoA reductase inhibitor coating; pravastatin tablet coating cellulose ether ester

IT Alkali metal hydroxides

Alkaline earth hydroxides

Alkaline earth oxides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (coating agents for oral formulations containing HMG-CoA reductase inhibitors)

IT Drug delivery systems

(tablets; coating agents for oral formulations containing HMG-CoA reductase inhibitors)

IT 9028-35-7, HMG-CoA reductase

RL: BSU (Biological study, unclassified); BIOL (Biological study) (coating agents for oral formulations containing HMG-CoA reductase inhibitors)

77-93-0, Triethyl citrate IT 1305-62-0, Calcium hydroxide, biological studies 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesia, biological studies 1310-58-3, Potassium hydroxide, biological studies 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, biological studies 1336-21-6, Ammonium hydroxide 9003-39-8, PVP 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl 12511-31-8, Magnesium aluminate metasilicate 21645-51-2, Aluminum hydroxide, biological studies 71138-97-1, Hydroxypropyl methyl cellulose acetate succinate 74978-16-8, Magaldrate 81093-37-0, Pravastatin 81131-70-6, Pravastatin sodium

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (coating agents for oral formulations containing HMG-CoA reductase inhibitors)

L32 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:129524 CAPLUS

DOCUMENT NUMBER:

132:286212

TITLE:

Cyclized copolymer of methacrylic anhydride and an application to **photoresist** with photoacid

generator

AUTHOR(S): Takao, Yasuyuki; Miyagawa, Nobukazu; Takahara,

Shigeru; Yamaoka, Tsuguo

CORPORATE SOURCE: Department of Information and Image science, Faculty

of Engineering, Chiba University, Chiba, 263-8522,

Japan

SOURCE: Journal of Photopolymer Science and Technology (1999),

12(5), 769-772

CODEN: JSTEEW; ISSN: 0914-9244

PUBLISHER: Technical Association of Photopolymers, Japan

DOCUMENT TYPE: Journal LANGUAGE: English

AB The cyclized copolymn. of methacrylic anhydride with N-phenyldimethacrylamide and methacrylonitrile was carried out. The polymer consists of six-membered cyclic acid anhydride and five-membered imide ring. The cyclic acid anhydride was hydrolized by generated acid catalyst from photoacid generator (PAG). The hydrolyzed copolymer is dissolved in an alkaline solution The authors applied this copolymer with PAG to photoresist based on the chemical amplified system and obtained good patterns of pos.-tone image.

IT 263896-37-3P, Methacrylic anhydride-methacrylonitrile-N-phenyldimethacrylamide copolymer

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(cyclized copolymer of methacrylic anhydride its acid-induced reaction and its application to chemical amplification photoresists)

RN 263896-37-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, anhydride, polymer with 2-methyl-N-(2-methyl-1-oxo-2-propenyl)-N-phenyl-2-propenamide and 2-methyl-2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 7370-86-7 CMF C14 H15 N O2

CM 2

CRN 760-93-0 CMF C8 H10 O3

CM 3

CRN 126-98-7 CMF C4 H5 N

$$\begin{matrix} \text{CH}_2 \\ \parallel \\ \text{H}_3\text{C-C-C} \end{matrix} = \text{N}$$

IT 263896-39-5P, Methacrylic anhydride-N-phenyldimethacrylamide copolymer

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (cyclized copolymn. of methacrylic anhydride with N-phenyldimethacrylamide in design of resists for photolithog. applications)

RN 263896-39-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, anhydride, polymer with 2-methyl-N-(2-methyl-1-oxo-2-propenyl)-N-phenyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7370-86-7 CMF C14 H15 N O2

CM 2

CRN 760-93-0 CMF C8 H10 O3

IT 75-59-2, Tetramethylammonium hydroxide

RL: NUU (Other use, unclassified); USES (Uses)
 (developer; cyclized copolymer of methacrylic anhydride its
 acid-induced reaction and its application to chemical amplification
 photoresists)

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_{3} \\ | \\ | \\ \text{CH}_{3} \\ | \\ \text{CH}_{3} \end{array}$$

● OH -

IT 104-15-4, 4-Toluenesulfonic acid, uses

RL: CAT (Catalyst use); USES (Uses)

(thermal reaction of cyclized copolymer of methacrylic anhydride with acid catalyst in relation to its application to photoresist with photoacid generator)

RN 104-15-4 CAPLUS

CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photoresist** photoacid reaction methacrylic anhydride cyclized copolymer

IT Photoresists

(chemical amplification; cyclized copolymer of methacrylic anhydride its acid-induced reaction and its application to **photoresist** with photoacid generator)

IT IR spectra

(cyclized copolymn. of methacrylic anhydride with N-phenyldimethacrylamide in design of **resists** for photolithog. applications)

IT Polymerization

(cyclized; cyclized copolymn. of methacrylic anhydride with N-phenyldimethacrylamide in design of **resists** for photolithog. applications)

IT 263896-37-3P, Methacrylic anhydride-methacrylonitrile-N-phenyldimethacrylamide copolymer

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(cyclized copolymer of methacrylic anhydride its acid-induced reaction and its application to chemical amplification photoresists)

IT 66003-76-7, Diphenyliodonium trifluoromethanesulfonate

RL: TEM (Technical or engineered material use); USES (Uses) (cyclized copolymer of methacrylic anhydride its acid-induced reaction and its application to chemical amplification photoresists)

IT 263896-39-5P, Methacrylic anhydride-N-phenyldimethacrylamide copolymer

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (cyclized copolymn. of methacrylic anhydride with N-phenyldimethacrylamide in design of resists for photolithog. applications)

IT 75-59-2, Tetramethylammonium hydroxide

RL: NUU (Other use, unclassified); USES (Uses)
 (developer; cyclized copolymer of methacrylic anhydride its
 acid-induced reaction and its application to chemical amplification
 photoresists)

IT 104-15-4, 4-Toluenesulfonic acid, uses

RL: CAT (Catalyst use); USES (Uses)
(thermal reaction of cyclized copolymer of methacrylic anhydride with acid catalyst in relation to its application to photoresist with photoacid generator)

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

9

ACCESSION NUMBER:

1999:624727 CAPLUS

DOCUMENT NUMBER:

131:236815

TITLE:

Semiconductor device having fine patterns and its

fabrication

INVENTOR(S):

Saito, Takayuki; Ishibashi, Takeo; Toyoshima,

Toshiyuki; Sugino, Kanji

PATENT ASSIGNEE(S):

Mitsubishi Denki K. K., Japan; Mitsubishi Electric

Corp.

SOURCE:

Ger. Offen., 14 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
	- <del>-</del>		
DE 19857094	A1	19990923	DE 1998-19857094 19981210
DE 19857094	B4	20040325	
TW 449799	В	20010811	TW 1998-87118976 19981117
PRIORITY APPLN. INFO.	:		JP 1998-56686 A 19980309
		ı	JP 1998-130052 A 19980513

AB In preparation of a fine resist pattern on a semiconductor substrate

which is narrower than the wavelength of the illumination light of a stepper, an acid-catalytically chemical strengthened **photoresist** is formed, and an organic film which contains an acid or forms an acid on illumination is formed on the substrate, including the **resist** pattern. The organic film is then heat treated to diffuse the acid. The surface layer of the **resist** pattern is made soluble in an alkaline developer and then is removed by an alkaline developer. As a result, a fine **resist** pattern is formed.

TT 75-59-2, Tetramethylammonium hydroxide 9003-39-8,
Polyvinylpyrrolidone

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(in fabrication of semiconductor devices having fine patterns)

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_3 \\ \mid \\ \mid \\ \text{H}_3\text{C} - \text{N} \xrightarrow{+} \text{CH}_3 \\ \mid \\ \text{CH}_3 \end{array}$$

● OH -

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IC ICM H01L021-312

ICS H01L021-31; H01L021-3105; H01L021-768

CC 76-3 (Electric Phenomena)

ST semiconductor device fine pattern manuf

IT Semiconductor device fabrication

(fabrication of semiconductor devices having fine patterns)

IT Semiconductor devices

(having fine patterns)

```
IT
      Photoresists
         (in fabrication of semiconductor devices having fine patterns)
      Carboxylic acids, processes
 IT
      Onium compounds
      Polymers, processes
      Polyvinyl acetals
      RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
     process); PROC (Process); USES (Uses)
         (in fabrication of semiconductor devices having fine patterns)
 ΙT
     Heat treatment
         (of organic films in fabrication of semiconductor devices having fine
        patterns)
     69-72-7, Salicylic acid, processes 75-59-2, Tetramethylammonium
IT
     hydroxide 141-43-5, Ethanolamine, processes 1608-42-0 7664-41-7,
     Ammonia, processes 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic
     acid 9003-39-8, Polyvinylpyrrolidone 20680-48-2
                                                        25191-25-7,
     Polyvinyl sulfuric acid
                              26336-38-9, Polyvinyl amine
                                                            30361-82-1
     55318-89-3, Diazobenzenesulfonic acid
     RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
     process); PROC (Process); USES (Uses)
         (in fabrication of semiconductor devices having fine patterns)
L32 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         1999:427455 CAPLUS
DOCUMENT NUMBER:
                         131:94865
TITLE:
                         Metal thin-film pattern formation by electroless
                         plating of photoresist
INVENTOR(S):
                         Takagi, Yoshihiro; Nagata, Soichiro
PATENT ASSIGNEE(S):
                         Fuji Film Orlean K. K., Japan
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 19 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                 KIND DATE
                                        APPLICATION NO. DATE
                     ----
                                          -----
     JP 11186697 A2
                           19990709
                                          JP 1997-351521 19971219
PRIORITY APPLN. INFO.:
                                       JP 1997-351521
                                                         19971219
     The metal thin-film patterns useful as elec. circuits are formed by
     electroless plating of photoresist patterns formed on a
     substrate. The electroless plating solution contains a specific reducing
     agent. The metal thin-film pattern formation is especially suitable for
manufacturing
     large screen plasma displays.
IT
     75-59-2, Tetramethylammonium hydroxide 9003-39-8,
     Poly(vinyl pyrrolidone)
    RL: TEM (Technical or engineered material use); USES (Uses)
        (in electroless plating solution for metal thin-film pattern formation by
        electroless plating of photoresist)
    75-59-2 CAPLUS
RN
```

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

● OH -

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

CMF C6 H9 N O

IC ICM H05K003-18

ICS C23C018-16; C23C018-31; G02F001-1343; G03F007-40

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76

ST metal thin film pattern formation electroless plating **photoresist** ; elec circuit fabrication electroless plating soln

IT Coating process

(electroless; metal thin-film pattern formation by electroless plating of **photoresist**)

IT Reducing agents

(in electroless plating solution for metal thin-film pattern formation by electroless plating of **photoresist**)

IT Gelatins, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(in electroless plating solution for metal thin-film pattern formation by electroless plating of **photoresist**)

IT Photoresists

(metal thin-film pattern formation by electroless plating of)

IT Electric circuits

(metal thin-film pattern formation by electroless plating of  ${\bf photoresist}$  for)

```
IT
     Plasma display panels
         (metal thin-film pattern formation by electroless plating of
        photoresist for manufacturing large screen)
             62-56-6, Thio urea, uses 75-59-2, Tetramethylammonium
IT
     hydroxide 96-45-7, Ethylene thiourea 107-15-3, 1,2-Ethanediamine, uses
     111-40-0 333-20-0, Potassium thiocyanate 1336-21-6, Ammonium hydroxide
     3251-23-8
                5244-34-8, 3,6-Dithiaoctan-1,8-diol 7761-88-8, Silver
                    7778-53-2, Tripotassium phosphate 7783-18-8, Ammonium
     nitrate, uses
                 9002-89-5, Poly(vinyl alcohol) 9003-39-8,
     thiosulfate
     Poly(vinyl pyrrolidone)
                              9004-32-4 9017-33-8, Formaldehyde-
     naphthalenesulfonic acid copolymer 14337-12-3, Chloroaurate
     37353-59-6, Hydroxymethylcellulose
     RL: TEM (Technical or engineered material use); USES (Uses)
        (in electroless plating solution for metal thin-film pattern formation by
        electroless plating of photoresist)
     7440-22-4P, Silver, preparation 7440-50-8P, Copper, preparation
TT
     7440-57-5P, Gold, preparation
     RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (metal thin-film pattern formation by electroless plating of
        photoresist)
     50-00-0, Formaldehyde, uses 50-81-7, L-Ascorbic acid, uses
IT
     Fructose, uses 59-23-4, Galactose, uses 80-72-8, Reductic acid
     111-30-8, Glutar aldehyde 112-57-2 932-52-5, 5-Aminouracil
     9004-53-9, Dextrin 9005-25-8, Starch, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (reducing agent; in electroless plating solution for metal thin-film
        pattern formation by electroless plating of photoresist)
L32 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                        1998:493162 CAPLUS
DOCUMENT NUMBER:
                        129:144416
TITLE:
                        Composition for the detection of electrophilic gases
                        and methods of use thereof
INVENTOR(S):
                        Verdicchio, Robert J.; Kaiser, Stewart R.; Walsh,
                        Shawn
PATENT ASSIGNEE(S):
                        R-Tect, Inc., USA
SOURCE:
                        U.S., 4 pp.
                        CODEN: USXXAM
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
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                           -----
                                         -----
    US 5783110
                     A
                           19980721
                                         US 1997-837355
                                                          19970417
    US 5951909
                      Α
                                         US 1998-65884
                           19990914
                                                          19980424
                     A
    ZA 9806420
                           19990805
                                         ZA 1998-6420
                                                          19980720
PRIORITY APPLN. INFO.:
```

US 1997-837355 A3 19970417

There is provided a composition for the detection of an electrophilic gas, such

as chlorodifluoromethane or carbon dioxide, which comprises a Lewis base

<07/12/2004>	$K \cap R \cap M \Delta$	- ETC	1700

capable of removing a proton from the gas or reacting therewith in a similar electrophilic manner; a dye capable of visibly indicating a color change on protonation or deprotonation; a solvent for the dye, the base and the gas; and a rheol. modifier capable of producing a non-Newtonian gel of all of these components which is sufficiently translucent to permit visual detection of change of color of the dye and of sufficient pseudoplasticity/thixotropy to provide adhesion to vertical and horizontal surfaces.

IT 1310-73-2, Sodium hydroxide, uses 9003-39-8,

Polyvinylpyrrolidone

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-OH

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IC ICM B01J013-00

ICS G01M003-20

NCL 252315100

CC 80-3 (Organic Analytical Chemistry)

ST electrophilic gas detection compn

IT Alcohols, uses

Amines, uses

Esters, uses

Ketones, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (aliphatic; gel composition for detection of electrophilic gases and methods of

use containing Lewis base, acid-base indicator or dye, solvent and rheol.
modifier)

IT Amines, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (alkoxylated; gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

IT Alcohols, uses

Amines, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (aralkyl; gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

IT Acid-base indicators

Electrophiles

Gas analysis

Gums and Mucilages

Rheology

Solvents

(gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

IT Acrylic polymers, uses

Alkali metal hydroxides

Alkaline earth hydroxides

Alkyd resins

Alkyl halides

Carbonates, uses

Lewis bases

Metal alkoxides

Reagents

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

IT Quaternary ammonium compounds, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (hydroxides; gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

IT Coating process

(spray; gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

IT 9003-01-4D, Polyacrylic acid, crosslinked with allyl ethers of pentaerythritol or sucrose

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (Carbopols; gel composition for detection of electrophilic gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

TT 9002-88-4, Polyethylene 9004-57-3, Ethylcellulose
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(coating; gel composition for detection of electrophilic
gases and methods of use containing Lewis base, acid-base indicator or dye, solvent and rheol. modifier)

```
IT
     75-45-6, Chlorodifluoromethane
                                      124-38-9, Carbon dioxide, analysis
     RL: ANT (Analyte); ANST (Analytical study)
         (gel composition for detection of electrophilic gases and methods of use
        containing Lewis base, acid-base indicator or dye, solvent and rheol.
        modifier)
TΨ
     67-56-1, Methanol, uses
                              67-64-1, Acetone, uses
                                                        67-68-5,
     Dimethylsulfoxide, uses
                               109-99-9, Tetrahydrofuran, uses
     Thymolphthalein 141-78-6, Ethyl acetate, uses 143-74-8, Phenol red
     1310-73-2, Sodium hydroxide, uses 1934-21-0, FD and C Yellow Number
         2303-01-7, m-Cresol purple 7732-18-5, Water, uses
     9002-89-5D, Polyvinyl alcohol, derivs. 9003-39-8,
     Polyvinylpyrrolidone 9004-34-6D, Cellulose, hydroxyalkyl derivs., uses
     9004-62-0, Hydroxy ethyl cellulose 9005-32-7D, Alginic acid, derivs.
     9005-38-3, Sodium alginate
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (gel composition for detection of electrophilic gases and methods of use
        containing Lewis base, acid-base indicator or dye, solvent and rheol.
REFERENCE COUNT:
                         20
                               THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L32 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         1996:422418 CAPLUS
DOCUMENT NUMBER:
                         125:67746
TITLE:
                         Enteric film coating compositions
                         for coating pharmaceutical tablets
INVENTOR(S):
                         Mehra, Dev K.; Ramireddy, Chittamuru; Tang, Li-Juan;
                         Porter, Stuart C.
PATENT ASSIGNEE(S):
                         Berwind Pharmaceutical Services, Inc., USA; Mehra,
                         Dev, K.; Ramireddy, Chittamuru; Tang, Li-Juan; Porter,
                         Stuart, C.
SOURCE:
                         PCT Int. Appl., 62 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO.
                                                           שתעת
```

FAIRNI NO. KIND DAIE					A.	PETIT	CATT	יא אכ	0.	DATE							
									-								
WO	9610	995		Α	1	1996	0418		W	0 19:	95-U	S129	34	1995	1006		
	W:	AL,	AM,	ΑT,	AU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	ES,
		FI,	GB,	GE,	HU,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LK,	LR,	LT,	LU,	LV,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	TJ														
	RW:	KE,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,
		LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE,
		SN,	TD,	TG													
US	US 5733575 A 19980331						U:	3 19	94-3	1998'	7	1994	1007				
TW	TW 397692 B 20000711						T	W 19	94-8	3110:	201	1994	1104				
zA	9508	147		A		1996	0716		$\mathbf{Z}_{i}$	A 19	95-8	147		1995	0927		
AU	9539	513		A:	1 :	1996	0502		Αl	J 19	95-39	9513		1995	1006		

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AU 684398
                       B2
                             19971211
      EP 781125
                       A1
                             19970702
                                          EP 1995-937388
                                                            19951006
      EP 781125
                       B1
                             20031210
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
      CN 1162917
                   Α
                            19971022
                                          CN 1995-195513 19951006
      JP 10506913
                      T2
                            19980707
                                           JP 1995-512671 19951006
      HU 77774
                      A2
                            19980828
                                           HU 1998-732
                                                           19951006
      AT 255887
                       Ε
                            20031215
                                           AT 1995-937388
                                                           19951006
      US 6013282
                       Α
                            20000111
                                           US 1997-978661
                                                            19971126
      US 6039976
                       Α
                            20000321
                                           US 1997-979537
                                                           19971126
 PRIORITY APPLN. INFO.:
                                        US 1994-319987 A1 19941007
                                        WO 1995-US12934 W 19951006
     A non-toxic edible enteric film coating dry powder compn
      . for use in making an aqueous enteric coating suspension which may be used in
     coating pharmaceutical tablets and the like comprises an enteric film
      forming polymer, a detackifier, a viscosity modifier, and an
     alkalizing/anti-coagulating agent. Advantageously, the inventive dry
     powder compns. may include a solid plasticizer, a lubricant, an
     anti-caking agent, a liquid plasticizer, and a pigment. An enteric film
     coating composition contained PVAP-T (titanized polyvinyl
     acetate phthalate) 85.0, talc-400 12, stearic acid 2.60, sodium alginate
     1.80, PEG-3350 12.00, Citroflex-2 2.40, sodium bicarbonate 3.00, and
     Cabosil EH5 1.20%.
     1310-58-3, Potassium hydroxide, biological studies
IT
     1310-73-2, Sodium hydroxide, biological studies 9003-39-8
     , Pvp
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (enteric film coating compns. for coating
        pharmaceutical tablets containing)
RN
     1310-58-3 CAPLUS
     Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)
CN
K-OH
RN
     1310-73-2 CAPLUS
CN
     Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
Na-OH
RN
     9003-39-8 CAPLUS
CN
    2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
    CM
    CRN 88-12-0
    CMF C6 H9 N O
```

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IC
     ICM A61K009-36
     63-6 (Pharmaceuticals)
CC
     enteric film coating pharmaceutical tablet; PVAP talc PEG enteric film
     coating; stearic acid alginate enteric film coating; bicarbonate PVAP talc
     enteric film coating
IT
     Agglomeration preventers
     Lubricants
     Plasticizers
        (enteric film coating compns. for coating
        pharmaceutical tablets containing)
     Alkali metal hydroxides
     Castor oil
     Polymers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (enteric film coating compns. for coating
        pharmaceutical tablets containing)
IT
     Tackifiers
        (de-, enteric film coating compns. for
        coating pharmaceutical tablets containing)
IT
        (lakes, FD&C and D&C; enteric film coating compns.
        for coating pharmaceutical tablets containing)
IT
     Pharmaceutical dosage forms
        (tablets, enteric film coating compns. for
        coating pharmaceutical tablets containing)
     50-78-2, Aspirin 56-81-5, Glycerol, biological studies 57-11-4,
IT
     Stearic acid, biological studies 77-89-4, Acetyltriethyl citrate
     77-93-0, Triethyl citrate
                                84-66-2, Diethyl phthalate
                                                            102-76-1,
    Glyceryl triacetate 109-43-3, Dibutyl sebacate
                                                       144-55-8, Sodium
    bicarbonate, biological studies 298-14-6, Potassium bicarbonate
     506-87-6, Ammonium carbonate 546-93-0, Magnesium carbonate
                                                                  1066-33-7,
    Ammonium bicarbonate
                           1305-62-0, Calcium hydroxide, biological studies
    1309-42-8, Magnesium hydroxide 1309-48-4, Magnesium oxide, biological
    studies 1310-58-3, Potassium hydroxide, biological studies
    1310-73-2, Sodium hydroxide, biological studies 7631-86-9,
    Silica, biological studies 7632-05-5, Sodium phosphate
                                                               9000-07-1,
    Carrageenan 9003-39-8, Pvp 9004-32-4, Sodium carboxymethyl
    cellulose
               9004-38-0, Cellulose acetate phthalate
                                                       9004-62-0,
    Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose
    9005-38-3, Sodium alginate 11138-66-2, Xanthan gum
                                                           13463-67-7,
    Titanium dioxide, biological studies 14807-96-6, Talc, biological
    studies 15307-79-6, Sodium diclofenac 16068-46-5, Potassium phosphate
```

53237-50-6D, titanized and jet milled

Hydroxypropyl methyl cellulose acetate succinate 110268-21-8, Opadry

71138-97-1,

144892-73-9, Aluminum hydrate

25322-68-3, Peg

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (enteric film coating compns. for coating pharmaceutical tablets containing)

IT 37220-17-0, Konjak mannan

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (flour; enteric film coating compns. for coating pharmaceutical tablets containing)

L32 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1995:813202 CAPLUS

DOCUMENT NUMBER:

123:202394

TITLE:

Coating compositions for

water-based ink-printable transparent sheets

INVENTOR(S):

Tsuji, Takahiro

PATENT ASSIGNEE(S):

Keiwa Shoko Kk, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07186520	A2	19950725	JP 1993-331917	19931227
JP 2547950	B2	19961030		

PRIORITY APPLN. INFO.:

JP 1993-331917 19931227

AB The title compns. with good ink receptivity and resistance to yellowing and opacifying are formulated from water-absorptive polymers (e.g. polyacrylate), binders [e.g. poly(vinyl alc.)], neutralizing agents (e.g. amines and alkali metal salts) and/or crosslinking agents (e.g. metal chelating compds. and epoxy compds.).

IT 9003-39-8, Polyvinylpyrrolidone

RL: TEM (Technical or engineered material use); USES (Uses) (coating compns. for water-based ink-printable transparent sheets)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

```
1310-58-3, Potassium hydroxide, reactions 1310-73-2,
TΨ
     Sodium hydroxide (Na(OH)), reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (neutralizing agents; coating compns. for
        water-based ink-printable transparent sheets)
RN
     1310-58-3 CAPLUS
     Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)
CN
K-OH
RN
     1310-73-2 CAPLUS
CN
     Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
Na-OH
IC
     ICM B41M005-00
     42-10 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 74
st
     recording overhead transparency waterborne coating; ink receptivity
     waterborne coating compn; absorbent polymer waterborne
     coating; polyvinyl alc binder waterborne coating; amine neutralizing agent
     waterborne coating; alkali metal salt waterborne coating; coating
     materials
ΙT
     Binding materials
     Crosslinking agents
        (coating compns. for water-based ink-printable
        transparent sheets)
IT
    Amines, uses
     Polyesters, uses
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (coating compns. for water-based ink-printable
        transparent sheets)
     Coating materials
IT
        (for water-based ink-printable transparent sheets)
IT
     Recording materials
        (overhead transparencies; coating compns. for
        water-based ink-printable)
IT
     Polyamines
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyethylene-, coating compns. for water-based
        ink-printable transparent sheets)
     Alkali metal compounds
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (salts, coating compns. for water-based
        ink-printable transparent sheets)
     9002-89-5, PVA-117 26142-30-3, Polypropylene glycol diglycidyl ether
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
```

```
(binder; coating compns. for water-based
         ink-printable transparent sheets)
 ΙT
      62-53-3, Benzenamine, reactions
                                        102-71-6, reactions
                                                             102-82-9,
      Tributylamine
                     102-86-3, Trihexylamine 107-10-8, Propylamine, reactions
      107-11-9, 2-Propen-1-amine 107-15-3, 1,2-Ethanediamine, reactions
      109-73-9, Butylamine, reactions 109-76-2, 1,3-Propanediamine
                 110-58-7, Amylamine 110-60-1, Tetramethylenediamine
      reactions
      111-26-2, Hexylamine
                           111-42-2, reactions 121-44-8, reactions
      124-09-4, 1,6-Hexanediamine, reactions
                                             124-22-1, Laurylamine
                                                                      141-43-5,
                 142-84-7, Dipropylamine 462-94-2, Pentamethylenediamine
     reactions
     620-40-6, Tribenzylamine
                               621-77-2, Tripentylamine
                                                           1675-54-3
     2425-79-8, 1,4-Butanediol diglycidyl ether 3454-29-3, Trimethylolpropane
     triglycidyl ether
                         6921-29-5, Tripropargylamine
                                                        13410-58-7
     13963-57-0, Aluminum tris(acetylacetonate)
                                                  19443-16-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (coating compns. for water-based ink-printable
         transparent sheets)
     9002-98-6 9003-01-4, Acrylic acid polymer
IT
                                                   9003-05-8, Acrylamide
               9003-20-7, Poly(vinyl acetate) 9003-39-8,
     Polyvinylpyrrolidone 17557-23-2
                                         25322-68-3
                                                      25322-69-4
     RL: TEM (Technical or engineered material use); USES (Uses)
         (coating compns. for water-based ink-printable
        transparent sheets)
IT
     100-46-9, Benzylamine, reactions 102-69-2, Tripropylamine
                                                                   103-83-3,
     Dimethylbenzylamine 110-86-1, Pyridine, reactions
                                                           110-89-4,
     Piperidine, reactions 110-91-8, Morpholine, reactions 1310-58-3
     , Potassium hydroxide, reactions 1310-65-2, Lithium hydroxide
     1310-73-2, Sodium hydroxide (Na(OH)), reactions
     Ammonium hydroxide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (neutralizing agents; coating compns. for
        water-based ink-printable transparent sheets)
TT
     25038-59-9, PET polyester, uses
     RL: DEV (Device component use); USES (Uses)
        (overhead transparencies; coating compns. for
        water-based ink-printable transparent sheets)
L32 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         1990:14284 CAPLUS
DOCUMENT NUMBER:
                         112:14284
TITLE:
                         Resist pattern formation with pretreatment
                         with agueous solution
INVENTOR (S):
                        Endo, Masayuki; Sasago, Masaru; Ueno, Atushi; Nomura,
                        Noboru; Matsuoka, Koji
PATENT ASSIGNEE(S):
                        Matsushita Electric Industrial Co., Ltd., Japan
SOURCE:
                        Eur. Pat. Appl., 28 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent.
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

KIND	DATE	APPLICATION NO.	DATE
A1	19890503	EP 1988-118138	19881031
GB			
A2	19900326	JP 1988-273424	19881028
. :		JP 1987-273695	19871029
		JP 1987-284508	19871111
		JP 1988-2870	19880108
		JP 1988-2871	19880108
		JP 1988-2872	19880108
		JP 1988-161652	19880629
	A1 GB A2	A1 19890503 GB A2 19900326	A1 19890503 EP 1988-118138  GB  A2 19900326 JP 1988-273424  : JP 1987-273695  JP 1987-284508  JP 1988-2870  JP 1988-2871  JP 1988-2872

AB A method of forming a fine and well-shaped resist pattern in lithog. fabrication of semiconductor devices comprises coating a resist layer on a substrate, treating the resist layer

with an aqueous solution so as to form a surface-treated layer which is difficult

to dissolve in an alkaline developer, imagewise exposing the surface-treated resist layer, and subjecting the exposed resist layer to development treatment. The surface treatment enhances the difference in the rate of dissolving in an alkaline developer between exposed and unexposed portions of the resist layer. As a result, a fine and

well-shaped pattern with an improved contrast is obtained. The aqueous solution

may contain choline or tetramethylammonium hydroxide and a surface-active agent containing F atom or either ether linkage or CO2H group or SO3 group or  $\geq 2$  of the above-mentioned atom, linkage, and groups. For further improving contrast, the **resist** layer may be coated with a far-UV-sensitive photofading layer containing a diazo compound or a nitrone compound or a styrylpyridine compound Heating may be carried out after completion of the aqueous solution treatment.

IT 9003-39-8, Poly(vinylpyrrolidone)

RL: USES (Uses)

(photoresist layers coated with, for enhanced contrast in lithog. fabrication of semiconductor devices)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IT 75-59-2, Tetramethylammonium hydroxide
RL: USES (Uses)

(photoresist patterns pretreated with aqueous solns. containing, for lithog. in fabrication of semiconductor devices)

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

● OH ~

IC ICM G03F007-26

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76

ST resist patterning pretreatment aq soln; semiconductor device manufg resist patterning

IT Lithography

(photoresist patterning with pretreatment with aqueous solution in, in fabrication of semiconductor devices)

IT Semiconductor devices

(photoresists patterning with pretreatment with aqueous solution in fabrication of)

IT Resists

(photo-, patterning of, with pretreatment with aqueous solns.)

RL: USES (Uses)

(photoresist layers coated with, for enhanced contrast in lithog. fabrication of semiconductor devices)

IT 62-49-7, Choline **75-59-2**, Tetramethylammonium hydroxide 77-98-5, Tetraethylammonium hydroxide

RL: USES (Uses)

(photoresist patterns pretreated with aqueous solns. containing, for lithog. in fabrication of semiconductor devices)

L32 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1989:415210 CAPLUS

DOCUMENT NUMBER:

111:15210

TITLE:

SOURCE:

Synthesis of new metal-free diazonium salts and their

applications to microlithography

AUTHOR(S):

Uchino, Shouichi; Hashimoto, Michiaki; Iwayanagi,

Takao

CORPORATE SOURCE:

Cent. Res. Lab., Hitachi Ltd., Kokubunji, 185, Japan Polymeric Materials Science and Engineering (1989),

60, 255-9

CODEN: PMSEDG; ISSN: 0743-0515

DOCUMENT TYPE:

LANGUAGE:

Journal English

Trifluoromethanesulfonates of 4-diazo-N,N-dimethylaniline and 4-diazoanisole were synthesized and applied not only to the contrast enhanced lithog. (CEL) dyes and neg. working sensitizers but also to photoacid generators for chemical amplification resist systems. A CEL layer consisting of 4-diazo-N,N-dimethylaniline trifluoromethanesulfonate (D1) and poly(N-vinylpyrrolidone) had good optical characteristics for i-line exposure and enabled 0.4-μm L&S pos. resists patterns. D1 is also a useful material for the neg. working sensitizer of phenolic resins. 4-Diazoanisole trifluoromethanesulfonate can be used as a photoacid generator for an acid-catalyzed close-linking type resist system which works in the mid-UV region. Submicron resist patterns were resolved using this highly sensitive resist system.

IT 75-59-2, Tetramethylammonium hydroxide

RL: USES (Uses)

(developer, for microlithog. **photoresist** containing metal-free diazonium salt and poly(vinylpyrrolidone))

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

OH-

IT 9003-39-8, Polyvinylpyrrolidone

RL: USES (Uses)

(microlithog. photoresist from metal-free diazonium salt and)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

CMF C6 H9 N O

```
CC
     74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
     Section cross-reference(s): 76
     microlithog diazonium salt prepn photoresist
ST
IT
     Diazonium compounds
     RL: PREP (Preparation)
         (metal-free, preparation for microlithog. photoresists)
     Resists
         (photo-, diazonium salt synthesis for, for microlithog.)
     64-17-5, Ethanol, uses and miscellaneous 75-59-2,
     Tetramethylammonium hydroxide 78-93-3, Methylethyl ketone, uses and
     miscellaneous
     RL: USES (Uses)
        (developer, for microlithog. photoresist containing metal-free
        diazonium salt and poly(vinylpyrrolidone))
IT
     121028-48-6
     RL: USES (Uses)
        (microlithog. photoresist composition containing)
IT
     9074-30-0, GE75108
                          24979-70-2, Poly(4-hydroxystyrene)
                                                                25067-05-4,
     Polyglycidyl methacrylate
     RL: USES (Uses)
        (microlithog. photoresist composition containing diazonium salt and)
TТ
     9003-39-8, Polyvinylpyrrolidone
     RL: USES (Uses)
        (microlithog. photoresist from metal-free diazonium salt and)
IT
     82802-22-0P
     RL: PREP (Preparation)
        (preparation of, for microlithog. photoresists)
IT
     99-98-9, N,N-Dimethyl-p-phenylenediamine
                                                1493-13-6,
     Trifluoromethanesulfonic acid
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, in preparation of metal-free diazonium salt for microlithog.
        photoresist)
L32 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         1988:201301 CAPLUS
DOCUMENT NUMBER:
                         108:201301
TITLE:
                         A body-fluid assay stick with an ink composition
INVENTOR (S):
                         Sakota, Kazuyuki
                         Dai Nippon Printing Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 12 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
```

Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62263466	A2	19871116	JP 1986-107872	19860512
JP 07062680	B4	19950705	- · · <del>-</del>	

PRIORITY APPLN. INFO.:

JP 1986-107872 19860512

AB A body fluid assay stick comprises a support coated with an ink composition of reagents dispersed or dissolved in a solvent capable of swelling the support. A stick for determining pH of a urine sample was composed

of a polystyrene sheet **coated** with a **composition** containing methyl red Na salt 0.070, bromothymol blue 1.0, dodecyltrimethylammonium chloride 1.0, NaOH 0.088, Kollidon 90 13.2, S-Lec BX-1 1.54, Avicel SF 174, and Bu Cellosolve 257 parts by weight

IT 1310-73-2, Sodium hydroxide, biological studies 9003-39-8 RL: ANST (Analytical study)

(ink compns. containing, for pH determination)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-OH

RN 9003-39-8 CAPLUS CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IC ICM G01N033-52 ICS G01N031-22

CC 9-1 (Biochemical Methods)

st nonaq solvent body fluid assay; styrene polymer body fluid assay; glucose detn body fluid; protein detn body fluid; pH detn body fluid

IT Proteins, analysis

RL: ANT (Analyte); ANST (Analytical study)

(determination of, in body fluid, test sticks for)

IT Albumins, analysis

RL: ANT (Analyte); ANST (Analytical study)

```
TΤ
     Body fluid
         (glucose and protein and pH determination in, test sticks for)
IT
     Guaiacum (resin)
         (glucose determination with compns. containing)
TT
     Solvents
         (nonaq., body fluid assay compns. containing)
     Urine analysis
        (pH determination in, ink compns. for)
IT
     Vinyl acetal polymers
     RL: ANST (Analytical study)
        (butyrals, ink compns. containing, for pH determination)
TT
     9003-53-6, Polystyrene
     RL: ANST (Analytical study)
        (body fluid test element with support of)
IT
     50-99-7, D-Glucose, analysis
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in body fluid, test stick for)
     9003-99-0, Peroxidase 25395-66-8, L-Ascorbyl stearate 9001-37-0,
IT
     Glucose oxidase
     RL: ANST (Analytical study)
        (glucose determination with compns. containing)
IT
     76-59-5, Bromothymol blue 111-76-2, Butyl cellosolve
                                                            112-00-5,
     Dodecyltrimethylammonium chloride 845-10-3, Methyl red sodium salt
     1310-73-2, Sodium hydroxide, biological studies 9003-39-8
     9004-34-6, Avicel SF, biological studies
     RL: ANST (Analytical study)
        (ink compns. containing, for pH determination)
     68-04-2, Sodium citrate 71-41-0, Amyl alcohol, biological studies
     112-07-2, Butyl cellosolve acetate 1338-39-2, Span 20 4430-25-5
     9004-32-4 9050-04-8, Carboxymethylcellulose calcium salt 54578-89-1
     77-92-9, Citric acid, biological studies
     RL: ANST (Analytical study)
        (protein determination with compns. containing)
L32 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                        1988:201300 CAPLUS
DOCUMENT NUMBER:
                        108:201300
TITLE:
                        A body fluid assay stick for glucose detection and
                        protein detection and/or pH determination, and a
                        method for manufacturing the stick
INVENTOR(S):
                        Sakota, Kazuyuki
PATENT ASSIGNEE(S):
                        Dai Nippon Printing Co., Ltd., Japan
SOURCE:
                        Jpn. Kokai Tokkyo Koho, 14 pp.
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
                     ____
```

(determination of, in urine, ink compns. for)

JP 62263469 A2 19871116 JP 1986-107871 19860512 PRIORITY APPLN. INFO.: JP 1986-107871 19860512

AB A body fluid assay stick is composed of the following regions: (1) a 1st region coated with a glucose-determination ink composition of a nonaq. solvent containing glucose oxidase, peroxidase, nonoxidizing indicator, sensitivity-regulating agent, stabilizer, pH buffer agent, binder, and H2O-absorbing powders; and (2) 1st, 2nd, and/or 3rd regions coated with a 2nd protein-determination ink composition of a solvent containing a protein-error

indicator, pH buffer agent, protein-adsorbing ion exchanger,
 shape-retaining agent, binder, and H2O-absorbing powders and/or a 3rd
 pH-determination ink composition of a solvent containing a pH indicator,
uaternary

ammonium or amine salt, basic material, binder, and H2O-absorbing powders. A method for manufacturing the stick involves preparing the 2nd and/or 3rd regions

on the support and then preparing the 1st region. A stick for urine anal. was prepared by successively printing a pH-determination ink composition containing NaOH,

methyl red, bromothymol blue, dodecyltrimethylammonium chloride, Kollidon 90, S-Lec BX-1, Avicel SF, and Bu Cellosolve, a protein-determination ink composition

containing tetrabromophenol blue, citric acid, Na citrate, Span 20, CM-32, CM-cellulose Ca salt, amyl ester of Gantrez AN-169, Avicel SF, amyl alc., and Bu Cellosolve acetate, and a glucose-determination ink composition containing glucose

oxidase, peroxidase, guaiacum resin, Span 20, L-ascorbyl stearate, citric acid, Na citrate, Kollidon 90, S-Lec BX-1, Avicel SF, amyl alc., and Bu Cellosolve acetate.

IT 1310-73-2, Sodium hydroxide, biological studies 9003-39-8 RL: ANST (Analytical study)

(ink compns. containing, for urine anal.)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

 $Na^-OH$ 

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

```
IC
     ICM G01N033-66
     9-1 (Biochemical Methods)
CC
     body fluid analysis stick; glucose detn body fluid stick; protein detn
ST
     body fluid stick; pH detn body fluid stick; urine analysis glucose protein
     рН
IT
     Body fluid
         (anal. of, test sticks for)
IT
     Proteins, analysis
     RL: ANT (Analyte); ANST (Analytical study)
         (determination of, in body fluid, test stick for)
IT
     Albumins, analysis
     RL: ANT (Analyte); ANST (Analytical study)
         (determination of, in urine, test sticks for)
IT
     Urine analysis
        (glucose and albumin and pH determination in, test sticks for)
IT
     Alkali metal hydroxides
     RL: ANST (Analytical study)
        (glucose determination in body fluid with ink composition containing)
     Guaiacum (resin)
IT
        (glucose determination in body fluid with ink compns. containing)
     Vinyl acetal polymers
     RL: ANST (Analytical study)
        (butyrals, ink compns. containing, for urine anal.)
ΤT
     50-99-7, Glucose, analysis
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in body fluid, test stick for)
IT
     492-61-5
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in urine, test stick for)
     50-81-7D, Ascorbic acid, esters
     RL: ANST (Analytical study)
        (glucose determination in body fluid with ink composition containing)
IT
     68-04-2, Sodium citrate 71-41-0, Amyl alcohol, biological studies
     76-59-5, Bromothymol blue 77-92-9, Citric acid, biological studies
    111-76-2, Butyl Cellosolve 112-00-5, Dodecyltrimethylammonium chloride
     112-07-2, Butyl Cellosolve acetate
                                        493-52-7, Methyl red
     1310-73-2, Sodium hydroxide, biological studies
                                                      1338-39-2, Span
         4430-25-5, Tetrabromophenol blue 9001-37-0, Glucose oxidase
               9003-99-0, Peroxidase
                                        9004-32-4
                                                     9004-34-6, Avicel
    SF, biological studies
                            9050-04-8, Carboxymethylcellulose calcium salt
    25395-66-8, Ascorbyl stearate
                                     54578-89-1
    RL: ANST (Analytical study)
        (ink compns. containing, for urine anal.)
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## Page 85Walke10722815

L32 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1988:183287 CAPLUS

DOCUMENT NUMBER:

108:183287

TITLE:

A pH determination ink composition containing a

quaternary ammonium or amine salt and basic substance

and a test stick for pH determination

INVENTOR(S):

Sakota, Kazuyuki

PATENT ASSIGNEE(S):

Dai Nippon Printing Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

Japane

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 62261060 A2 19871113 JP 1986-103577 19860506

PRIORITY APPLN. INFO.: JP 1986-103577 19860506

AB An ink composition for pH determination is composed of a solvent containing a dispersed or

dissolved reagent composition of a pH indicator, quaternary ammonium or amine salt, basic substance, binder, and H2O-absorbing powders. A test stick is composed of a support coated with the above ink composition

An ink composition was prepared by adding BuOH 5 containing NaOH 0.088 parts by weight

to a blend containing methyl red Na salt 0.070, bromothymol blue 1.0, dodecyltrimethylammonium chloride 1.0, Kollidon 90 13.2, S-Lec BX-1, 1.54, Avicel SF 174, and Bu Cellosolve 257 parts by weight A stick coated with the above composition showed a bright color when used for a urine sample.

IT 1310-73-2, Sodium hydroxide, biological studies 9003-39-8 RL: BIOL (Biological study)

(pH determination with ink compns. containing)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-OH

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

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CH=CH<sub>2</sub>
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IC ICM G01N031-22

ICS G01N033-52; G01N033-84

CC 9-1 (Biochemical Methods)

ST alkali metal hydroxide pH detn; urine pH detn ink compn

IT Acid-base equilibrium

(determination of, ink composition and test stick for)

IT Alkali metal hydroxides

Quaternary ammonium compounds, uses and miscellaneous

RL: ANST (Analytical study)

(ink compns. containing, for pH determination)

IT Urine analysis

(pH determination in, ink compns. and test sticks for)

IT Vinyl acetal polymers

RL: ANST (Analytical study)

(butyrals, pH determination with ink compns. containing)

IT Amines, compounds

RL: ANST (Analytical study)

(salts, ink compns. containing, for pH determination)

IT 71-36-3, Butanol, biological studies 76-59-5, Bromothymol blue 111-76-2, Butyl Cellosolve 112-00-5, Dodecyltrimethylammonium chl

111-76-2, Butyl Cellosolve 112-00-5, Dodecyltrimethylammonium chloride 493-52-7, Methyl red 845-10-3, Methyl red sodium salt 1310-73-2

, Sodium hydroxide, biological studies 9003-39-8 9004-34-6,

Avicel SF, biological studies

RL: BIOL (Biological study)

(pH determination with ink compns. containing)

L32 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1987:536389 CAPLUS

DOCUMENT NUMBER:

107:136389

TITLE:

Drain cleaner

INVENTOR (S):

Taylor, Roy M., Jr.; Klemm, Steven R.

PATENT ASSIGNEE(S):

Amway Corp., USA

SOURCE:

U.S., 8 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

Engil

PAMERIE THEODOG TOTAL

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4664836	Α	19870512	US 1985-777409	19850918
PRIORITY APPLN. INFO.	:	US	1985-777409	19850918
AB A drain-cleaning	compo	<b>sition</b> contains	≥40% free-flowing	Э,

coated alkali metal hydroxide and 5-20% mixture of hypochlorite generator and peroxide generator. During use, the composition produces free hypochlorite ions for dissolving hair and other protein-based clogs. The coated alkali metal hydroxide does not react with other components of the composition before the mixture is added to water. A drain cleaner comprised 74.7% coated caustic (NaOH) 90.88, phthalocyanine blue 0.12, and C12-14 fatty acid monoethanolamide coating 9.00%, 11.0% effervescent system (citric acid 31.00, NaHCO3 49.00, and CaSO4 20.00%), 6.2% peroxide source (Na percarbonate 80.00, Na2CO3 12.00, water 1.00, and 40% Na silicate solution as agglomerating agent 10.00%), 8.0% hypochlorite generator (Na dichloroisocyanurate dihydrate), and 0.01 mineral oil (dust inhibitor). The cleaner was effective on drain clogs based on grease, hair, and/or soap.

IT 1310-73-2, Sodium hydroxide, uses and miscellaneous
RL: USES (Uses)

(drain cleaners containing coated particles of, stable)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

 $Na^-OH$ 

IT 9003-39-8, Vinyl pyrrolidone polymer

RL: USES (Uses)

(sodium hydroxide encapsulated by, for drain cleaner)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IC ICM C11D007-06

ICS C11D007-54; C11D017-06; B08B009-02

NCL 252091000

CC 46-6 (Surface Active Agents and Detergents)

ST alkali drain cleaner; hypochlorite drain cleaner; peroxide drain cleaner; hair dissolver drain cleaner; drain cleaner hair grease; percarbonate granulation drain cleaner; amide encapsulation alkali cleaner; encapsulation alkali drain cleaner; coating alkali particle cleaner; effervescence alkali drain cleaner; dichloroisocyanurate drain cleaner; silicate granulation percarbonate cleaner

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IT
     Detergents
         (drain cleaner, alkali-hypochlorite-peroxide, stable, hair-dissolving)
     Encapsulation
IT
         (of alkali metal hydroxide particles, for stable drain cleaner)
IT
     Agglomeration
         (of sodium percarbonate powder, for drain cleaner)
IT
     Granulation
         (of sodium percarbonate, for stable drain cleaner)
IT
     Amides, compounds
     RL: USES (Uses)
        (C12-14, N-(hydroxyethyl), sodium hydroxide particles coated by, drain
        cleaners containing, stable)
ΙT
     1310-73-2, Sodium hydroxide, uses and miscellaneous
     RL: USES (Uses)
        (drain cleaners containing coated particles of, stable)
     10058-23-8
                  11138-47-9, Sodium perborate
     RL: USES (Uses)
        (drain cleaners containing hypochlorite and, stable, hair-dissolving)
IT
     2893-78-9
     RL: USES (Uses)
        (drain cleaners containing peroxide and, stable, hair-dissolving)
IT
     15630-89-4, Sodium percarbonate
     RL: USES (Uses)
        (drain cleaners containing sodium dichloroisocyanurate and, stable,
        hair-dissolving)
IT
     497-19-8, Disodium carbonate, uses and miscellaneous
     RL: USES (Uses)
        (drain cleaners containing, stable, hair-dissolving)
     77-92-9, Citric acid, uses and miscellaneous
IT
                                                   87-69-4, Tartaric acid,
     uses and miscellaneous 110-15-6, Succinic acid, uses and miscellaneous
     110-17-8, Fumaric acid, uses and miscellaneous
                                                    124-04-9, Adipic acid,
     uses and miscellaneous 144-55-8, Sodium bicarbonate, uses and
                   298-14-6, Potassium bicarbonate 533-96-0, Sodium
     miscellaneous
     sesquicarbonate
                       584-08-7, Dipotassium carbonate 6915-15-7, Malic acid
     11113-50-1, Boric acid
    RL: USES (Uses)
        (effervescent system containing, for drain cleaner)
IT
    1344-09-8, Sodium silicate
    RL: USES (Uses)
        (granulating agents, for sodium percarbonate in drain cleaner)
    57-55-6, Propylene glycol, uses and miscellaneous
IT
    RL: MOA (Modifier or additive use); USES (Uses)
        (plasticizers, for Et cellulose coating on sodium hydroxide particles)
IT
    141-43-5D, Ethanolamine, amides with fatty acids 9003-01-4, Acrylic acid
    polymer
              9003-09-2, Methyl vinyl ether polymer
                                                       9003-11-6, Ethylene
    oxide-propylene oxide copolymer 9003-39-8, Vinyl pyrrolidone
              9004-38-0
                         9004-57-3, Ethyl cellulose
                                                        9006-26-2,
    Ethylene-maleic anhydride copolymer
                                         9011-13-6
                                                       9011-16-9, Maleic
    anhydride-methyl vinyl ether copolymer
                                              25086-89-9, Vinyl acetate-vinyl
    pyrrolidone copolymer 25087-26-7, Methacrylic acid polymer
                                                                    25322-68-3,
    Polyethylene qlycol
    RL: USES (Uses)
```

(sodium hydroxide encapsulated by, for drain cleaner)

L32 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1987:468197 CAPLUS

DOCUMENT NUMBER:

107:68197

TITLE:

Developers for positive-working photoresists

INVENTOR(S):
PATENT ASSIGNEE(S):

Tanaka, Hatsuyuki; Asaumi, Shingo Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62032451	A2	19870212	JP 1985-171833	19850806
US 4784937	Α	19881115	US 1986-892646	19860804
PRIORITY APPLN. INFO.	:		JP 1985-171833	19850806
			JP 1985-171834	19850806

AB The title developers, containing metal ion-free organic bases and 50-500 ppm F-containing nonionic surfactants, are suitable for pos.-working photoresists containing quinone diazides and show reduced temperature-dependence during development. An exposed pos.-working photoresist produced uniform patterns at 15-40° in 30 s when developed with an aqueous solution containing 2.38% tetramethylammonium hydroxide and 500 ppm F3C(CF2)7(CH2CH2O)10H.

IT 75-59-2, Tetramethylammonium hydroxide

RL: USES (Uses)

(developer containing, for pos.-working photoresist)

RN 75-59-2 CAPLUS

CN Methanaminium, N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_3 \\ \mid \\ \text{H}_3\text{C} - \text{N} \xrightarrow{+} \text{CH}_3 \\ \mid \\ \text{CH}_3 \end{array}$$

OH -

IT 109636-64-8

RL: USES (Uses)

(surfactants, developer containing, for pos.-working photoresist)

RN 109636-64-8 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[2-[(5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heptadecafluoro-1-oxododecyl)methylamino]ethyl]- $\omega$ -hydroxy-

(9CI) (CA INDEX NAME)

IC ICM G03C005-24

ICS G03C001-72; G03F007-00; G03F007-08

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photoresist** pos developer org base; fluorine nonionic surfactant tetramethylammonium hydroxide; choline tetramethylammonium hydroxide developer **photoresist** 

IT Resists

(photo-, pos.-working, developer for, containing fluoro compound surfactant)

IT 62-49-7 **75-59-2**, Tetramethylammonium hydroxide

RL: USES (Uses)

(developer containing, for pos.-working photoresist)

IT 29117-08-6 58228-15-2 109636-63-7 109636-64-8

RL: USES (Uses)

(surfactants, developer containing, for pos.-working photoresist)

L32 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1987:166250 CAPLUS

DOCUMENT NUMBER:

106:166250

TITLE:

Ink-jet recording system

INVENTOR(S):

Sakaki, Mamoru; Arai, Ryuichi

PATENT ASSIGNEE(S):

Canon K. K., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

DOCOMENT TIPE.

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 61199979 A2 19860904 JP 1985-41302 19850304
PRIORITY APPLN. INFO.: JP 1985-41302 19850304

AB The ink receptor layer of the title system is composed of complexes of a polyalc. with boric acid or a borate and the ink contains 20-90% H2O. The receptor sheet is noncurling, nonsticking, and retains high ink acceptability at high temperature. The obtained copies are resistant to water and humidity and are storage stable. Thus, A PET film was coated with a composition containing PVA-217, boric acid, and NaOH to form a  $100\mbox{-}\mu$  colorless, transparent layer. After ink-jet printing, the image was set for 5 min, to give dot d. 1.1. The image was suitable as transparency for overhead projector. No trouble was experienced in the transport of the material within the recording system and the fingerprints

on the material surface were easily wiped off. A control material without boric acid and NaOH showed good printability, but produced difficulty in mech. transport and was permanently smudged by fingerprints.

IT 1310-73-2, Sodium hydroxide, uses and miscellaneous

RL: USES (Uses)

(ink-jet printing material with receptor sheet containing polyalc. and boric acid and)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-OH

IT 9003-39-8, Poly(vinylpyrrolidone)

RL: USES (Uses)

(ink-jet printing with receptor layer containing boric acid and)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

CMF C6 H9 N O

IC ICM B41M005-00

ICS B41J003-04

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST polyalc borate ink jet receptor; projector transparency ink jet printing

IT Projection slides

(ink-jet printing material for, receptor sheet containing polyalc. and boric acid for)

IT Projection slides

(color, ink-jet printing material for, receptor sheet containing polyalc. and boric acid for)

IT Printing, nonimpact

(ink-jet, with receptor layer containing polyalc. and boric acid)

IT Audio-visual aids

(projection slides, ink-jet printing material for, receptor sheet containing polyalc. and boric acid for)

IT 69-65-8, D-Mannitol 107721-24-4

RL: USES (Uses)

(ink-jet material with receptor sheet containing boric acid and)

IT 1303-96-4, Borax 10043-35-3, Boric acid, uses and miscellaneous

RL: USES (Uses)

(ink-jet printing material with receptor sheet containing polyalc. and)

IT 1310-73-2, Sodium hydroxide, uses and miscellaneous

RL: USES (Uses)

(ink-jet printing material with receptor sheet containing polyalc. and boric acid and)

IT 9002-89-5, Poly(vinylalcohol) 9003-39-8, Poly(vinylpyrrolidone)

9004-62-0, Hydroxyethyl cellulose

RL: USES (Uses)

(ink-jet printing with receptor layer containing boric acid and)

L32 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1986:505709 CAPLUS

DOCUMENT NUMBER:

105:105709

TITLE:

Processing photosensitive silver halide color

photographic material

INVENTOR(S):

Koboshi, Shigeharu; Kobayashi, Kazuhiro; Kuse, Satoru

Konishiroku Photo Industry Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 69 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.		DATE	APPLICATION NO. DATE
	A2		EP 1985-110372 19850819
EP 175153	A3	19881117	
EP 175153	B1	19910327	
R: DE, GB			
JP 61050146	A2	19860312	JP 1984-172571 19840820
JP 03076732	B4	19911206	
JP 61050147	A2	19860312	JP 1984-172572 19840820
JP 03076733	B4	19911206	
JP 61072247	A2	19860414	JP 1984-193607 19840914
JP 04002177	B4	19920116	
JP 61072248	A2	19860414	JP 1984-193608 19840914
JP 04002178	B4	19920116	
AU 8546417	<b>A1</b>	19860227	AU 1985-46417 19850819
AU 599573	B2	19900726	
US 5075202	A	19911224	US 1990-581210 19900910
PRIORITY APPLN. INFO.	:		JP 1984-172571 19840820
			JP 1984-172572 19840820
			JP 1984-193607 19840914
			JP 1984-193608 19840914
			US 1985-766119 19850815
			US 1987-8141 19870122
			US 1987-142344 19871228
			US 1989-379654 19890711
_			

AB A photog. processing method is described which causes less stains at cut

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surfaces of a photog, paper and provides stable dye images. The method involves imagewise exposure of a photosensitive material containing a Ag halide emulsion layer on (1) a support coated with an electron-beam cured resin or (2) one side or both sides of a support of an opaque thermoplastic film comprising a polyester film coated on one or both sides with fine particles of the white pigment and/or a polyester film containing the white particles dispersed in it, color developing, bleach-fixing, and stabilizing without any H2O washing step. Thus, a paper support was coated on both sides with a composition containing Araldite CY 179 62 4,4-dimethyldiphenyliodonium hexafluoroacetate 3, TiO2 35 weight parts, electron-beam irradiated, and on one side coated with a Aq halide emulsion containing a coupler. The element was imagewise exposed, developed for 3 min 15 s in a composition containing K2CO3 30, Na2SO3 2, hydroxyamine sulfate

2.2, KBr 1.2, diethylenetriaminepentaacetic acid 2, NaOH 3.4, N-ethylene-N- $\beta$ -hydroxyethyl-3-methyl-4-aminoaniline HCl 4.6 g, H2O to 1 L (pH 10.05) at 37.8°, bleach-fixed for 1 min 30 s using a solution containing EDTA Fe-NH3 salt 50, diethylenetriaminepentaacetic acid 10 q, 70% ammonium thiosulfate 200, 40% ammonium sulfite 10 mL, H2O to 1 L (pH 6.8) at 37.8°, stabilized for 2 min 10 s in a solution containing 2-methyl-4-isothiazolin-3-one 0.004, 2-methyl-5-chloro-4-isothiazolin-3one 0.02, 1-hydroxyethylidene-1,1'-diphosphoric acid 0.01, 2-octyl-4-isothiazolin-3-one 0.03, MqCl2 0.17, BiCl3 0.14, poly(vinylpyrrolidone) 0.1, nitriloacetic acid 3, 28% aqueous NH4OH 3 g, H2O to 1 L (pH 7.1) at 30-34°. The obtained sample was superior to a control (subjected to the processing with H2O washing in place of stabilization) in edge contamination, in stain in the image parts, and also in dye concentration

IT 1310-73-2, uses and miscellaneous 9003-39-8 RL: USES (Uses) (color photog. processing compns. containing)

1310-73-2 CAPLUS RN

Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME) CN

Na-OH

RN 9003-39-8 CAPLUS CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

1 CRN 88-12-0

CM

CMF C6 H9 N O

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CH=CH2
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IC ICM G03C001-80

ICS G03C007-30

74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes)

STcolor photog processing

Polyesters, uses and miscellaneous IT

RL: USES (Uses)

(photog. color element with paper support coated with

electron beam-curable composition containing, processing method for)

IT Photographic processing

(color, water washing step elimination in)

IT 67-43-6 139-13-9 584-08-7 869-52-3D, iron complex 1310-73-2 , uses and miscellaneous 1336-21-6 2682-20-4 2809-21-4 7439-89-6D, complex with triethylenetetraminehexaacetic acid 7757-83-7 7758-02-3, uses and miscellaneous 7783-18-8 7786-30-3, uses and miscellaneous 7787-60-2 **9003-39-8** 10196-04-0 13973-61-0 21265-50-9 26172-55-4 26530-20-1 103481-24-9 103690-85-3 104002-61-1 RL: USES (Uses)

(color photog. processing compns. containing)

IT 673-48-3 7727-43-7 13048-33-4 13463-67-7, uses and miscellaneous 15625-89-5 25038-59-9, uses and miscellaneous 25068-38-6 25085-98-7 61245-67-8

RL: USES (Uses)

(photog. color element with paper support coated with electron beam-curable composition containing, processing method for)

L32 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1986:43180 CAPLUS

DOCUMENT NUMBER:

104:43180

TITLE:

INVENTOR(S):

Image formation material and correction method Taguchi, Takao; Kumagai, Koji; Kodaira, Takeo

PATENT ASSIGNEE(S):

Toppan Printing Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	<b>-</b> -			
JP 60140237	A2	19850725	JP 1983-249735	19831227
JP 2938073	B2	19990823		
PRIORITY APPLN. INFO.	:		JP 1983-249735	19831227

AB A material for metal image formation has a flexible support, a thin metal layer, and a photosensitive polymer layer containing a component that changes its solubility and a component that changes its color, both by irradiation One of

the claimed methods for the correction of insufficient dot area of halftone images or line widths involves total exposure ( $\leq$ 15% of the previous exposure) and successive or simultaneous development and etching of the metal thin layer. Another method involves exposure (≥60% of normal exposure) and a 2nd exposure (≤15% of the previous exposure) to parts that need not be corrected, followed by successive or simultaneous development and etching similar to before. These simplify and facilitate free correction of the exposed plate, with the aid of a visible image. Thus, an Al-laminated poly(ethylene terephthalate) film (Metalumy) was coated with a photosensitive composition containing Styrite HS-2 (an alkali-soluble resin) 5, trimethylolpropane triacrylate 5, Michler's ketone 0.5, 2-(o-chlorophenyl)-4,5-diphenylimidazole dimer 1.0, leuco malachite green 0.5, and 2-butanone 90 g and then coated with a poly(vinyl alc.) protective layer. Exposure through an original produced a green image. Immersion in 0.3% aqueous KOH for 10 s, rubbing with a sponge, immersion in an aqueous solution containing HNO3, CuO and ammonium acid fluoride gave

an Al metal image having a high resolution, a high contrast, and a d. of 4.0. IT 9003-39-8

RL: USES (Uses)

(correction solns. containing carbon black and, for aluminum metal images using photosensitive polymer compns.)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IT 1310-58-3, uses and miscellaneous

RL: USES (Uses)

(developer solns. containing, for forming aluminum images on poly(ethylene terephthalate) film supports using photosensitive polymer compns.)

RN 1310-58-3 CAPLUS

CN Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)

K-OH

IC ICM G03C005-00 ICS G03C001-00 ICA G03F001-00 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) image formation metal printing out; photosensitive polymer metal image formation IT Carbon black, uses and miscellaneous RL: USES (Uses) (correction solns. containing poly(vinylpyrrolidone) and, for aluminum metal images using photosensitive polymer compns.) IT Lithographic plates Printing plates (formation and correction of aluminum images with photosensitive polymer compns. in fabrication of) ΙT Photoimaging compositions and processes (photosolubilizable polymer compns. containing leuco dye and, for metal image formation and correction) Rubber, butadiene, uses and miscellaneous IT RL: USES (Uses) (cyclized, photosensitive polymer compns. containing, for aluminum metal image formation and correction) IT 9003-39-8 RL: USES (Uses) (correction solns. containing carbon black and, for aluminum metal images using photosensitive polymer compns.) 1310-58-3, uses and miscellaneous IT RL: USES (Uses) (developer solns. containing, for forming aluminum images on poly(ethylene terephthalate) film supports using photosensitive polymer compns.) TT 1317-38-0, uses and miscellaneous 7697-37-2, uses and miscellaneous 7705-08-0, uses and miscellaneous 12125-01-8 RL: USES (Uses) (etching solns. containing, for forming aluminum images on poly(ethylene terephthalate) film supports using photosensitive polymer compns.) IT 7429-90-5P, uses and miscellaneous RL: PREP (Preparation); USES (Uses) (images, on poly(ethylene terephthalate) film supports, formation and correction of, photosolubilizable polymer compns. containing leuco dye for)  $\mathbf{IT}$ 90-94-8 129-73-7 1592-43-4 6143-80-2 15625-89-5 76283-05-1 RL: USES (Uses) (photosensitive polymer compns. containing, for aluminum metal image formation and correction) L32 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1985:229491 CAPLUS

DOCUMENT NUMBER:

102:229491

TITLE:

High contrast photoresist developer

INVENTOR(S):

Lewis, James Marvin; Owens, Austin; Blakeney, Andrew

Joseph

PATENT ASSIGNEE(S):

Allied Corp., USA

## Page 97Walke10722815

SOURCE:

Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 129106	A1	19841227	EP 1984-106059	19840528
EP 129106	B1	19880127		
R: DE, FR,	GB, IT			
CA 1251350	A1	19890321	CA 1984-455255	19840528
JP 60012547	A2	19850122	JP 1984-125000	19840618
JP 04062576	B4	19921006		
US 4661436	A	19870428	US 1985-767318	19850819
PRIORITY APPLN. INFO.	:	US	3 1983-505571	19830617
AR A developer for	a nog	diazo photoros	ist contains on a	11-01-

A developer for a pos. diazo photoresist contains an alkali metal hydroxide, H2O and  $\geq 0.001\%$  of a nonionic fluorocarbon surfactants. Addition of the surfactant results in increased contrast of the developed image. Thus, a Si wafer (dehydrated at 200° and treated with hexamethyldisilazone) was spun coated with a photoresist containing a novolak resist and diazonaphthoquinonesulfonic acid ester, baked at 100° for 3 min. UV imagewise exposed, immersed in a developer containing 0.271N aqueous KOH, and a mixture of surfactants having formula F(CF2)n(CH2CH2O)mCH2CH2OH (n = 3-6; m > 5-26) 0.016% at 22° for 60 s, and dried. The sensitivity of the resist was 8 mJ/cm2 and contrast 12.5 vs. 25 mJ/cm2 and 2.2 using surfactants-free control developer.

IT 96743-36-1

RL: USES (Uses)

(developer composition containing alkali metal hydroxide and, for pos. diazo photoresists, for increased image contrast)

RN96743-36-1 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[2-

[methyl(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl)amino]ethoxy]-(9CI) (CA INDEX NAME)

IT 1310-58-3, uses and miscellaneous 1310-73-2, uses and

miscellaneous

RL: USES (Uses)

(developer composition containing nonionic fluorohydrocarbon surfactant and, for

pos. diazo photoresists, for improved image contrast)

RN 1310-58-3 CAPLUS CN Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)

K-OH

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-- ОН

IC ICM G03F007-26

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

fluorocarbon surfactant diazo photoresist developer; pos diazo photoresist surfactant developer; nonionic fluorosurfactant photoresist developer

IT Resists

(developer for, consisting of alkali metal hydroxide and nonionic fluorocarbon surfactant)

IT Phenolic resins, uses and miscellaneous

RL: USES (Uses)

(photoresist composition containing diazo compound and, alkaline developer for, containing nonionic fluorocarbon surfactant, for increased image contrast)

IT Surfactants

(nonionic, fluorocarbon, **photoresist** alkaline developer composition containing, for improved image contrast)

IT Resists

(photo-, pos.-working, diazo, alkaline developer for, containing nonionic fluorocarbon surfactant, for improved image contrast)

IT 96743-36-1 96743-37-2 96743-38-3 96743-39-4

RL: USES (Uses)

(developer composition containing alkali metal hydroxide and, for pos. diazo photoresists, for increased image contrast)

IT 1310-58-3, uses and miscellaneous 1310-73-2, uses and

miscellaneous

RL: USES (Uses)

(developer composition containing nonionic fluorohydrocarbon surfactant and, for

pos. diazo photoresists, for improved image contrast)

IT 20680-48-2D, esters

RL: USES (Uses)

(photoresist containing, developer composition for, containing alkali metal hydroxide and nonionic fluorocarbon surfactant, for improved image contract)

L32 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1980:504855 CAPLUS

DOCUMENT NUMBER:

93:104855

## Page 99Walke10722815

TITLE:

SOURCE:

Colored pH-sensitive films and their uses

INVENTOR(S):

Taga, Hideji

PATENT ASSIGNEE(S):

Pilot Ink Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55003956	A2	19800112	JP 1978-77141	19780626
PRIORITY APPLN. INFO.	:		JP 1978-77141	19780626

AB A transparent film is coated with a uniform mixture of a compound whose color changes with pH change, a pH controlling agent which controls the pH of the mixture in the range where the compound is in colored state and a hydrophilic solid binder to give a pH-sensitive imaging sheet useful for preparing transparencies for overhead projectors. The transparency can be prepared by drawing images on the film by using a marking pen containing an acidic or alkaline solution depending on the type of the pH-sensitive compound

pH-sensitive compound can be selected from various pH indicators whose colored state absorbs light from fluorescent lamps., etc. Thus, a film support was coated with a composition consisting of

Bromophenol Blue 0.5, Bromocresol Green 0.5, Gesenol GL-0 2 [a poly(vinyl alc.)] 5.0, Na2CO3 0.5, EtOH 20, and H2O 73.5 parts to give a blue film. When images are drawn with a solution containing concentrate H2SO4 0.5, ethylene glycol

10, yellow dextrin 3, and H2O 86.5 parts, fluorescent type yellow images were formed. The images could be easily corrected by using a correction fluid composed of triethanolamine 10, H2O 89.8, and Adekatol SW (a nonionic surfactant) 0.2 part.

IT 1310-73-2, uses and miscellaneous

RL: USES (Uses)

(inks containing, for drawing or erasing images on pH-sensitive image recording sheet)

RN 1310-73-2 CAPLUS

CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)

Na-OH

IT 9003-39-8

RL: USES (Uses)

(pH-sensitive imaging sheet containing pH indicator and, for overheat projector transparencies)

RN 9003-39-8 CAPLUS

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0 CMF C6 H9 N O

IC B41M005-12; C09K009-00; G03C011-22

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST pH sensitive imaging film; projection transparency film

IT Projection slides

(pH-sensitive imaging sheets for, for overhead projectors)

TT 64-17-5, uses and miscellaneous 64-19-7, uses and miscellaneous 77-09-8 102-71-6, uses and miscellaneous 107-21-1, uses and miscellaneous 111-46-6, uses and miscellaneous 144-62-7, uses and miscellaneous 497-19-8, uses and miscellaneous 1310-73-2, uses and miscellaneous 7447-40-7, uses and miscellaneous 7647-01-0, uses and miscellaneous 7664-93-9, uses and miscellaneous 9004-53-9 9016-45-9 12220-28-9 74434-15-4

RL: USES (Uses)

(inks containing, for drawing or erasing images on pH-sensitive image recording sheet)

IT 76-60-8 115-39-9 6358-69-6 28631-66-5 28983-56-4 74434-60-9 RL: USES (Uses)

(pH-sensitive imaging sheet containing binder resin and, for overheat projector transparencies)

IT 9002-89-5 9003-20-7 9003-39-8

RL: USES (Uses)

(pH-sensitive imaging sheet containing pH indicator and, for overheat projector transparencies)

L32 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1978:122164 CAPLUS

DOCUMENT NUMBER:

88:122164

TITLE:

Preventing deposition in polymerization and

polymerization reaction apparatus

INVENTOR(S):

Cohen, Louis

PATENT ASSIGNEE(S):

Goodrich, B. F., Co., USA

SOURCE:

Ger. Offen., 46 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 4

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PATENT INFORMATION:

PATENT NO.

KIND DATE

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APPLICATION NO. DATE

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DE 2735770
                       A1
                            19780223
                                           DE 1977-2735770 19770809
     US 4081248
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                                          DK 1977-3030
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     AU 7726824
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     JP 53023381
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                                          JP 1977-93479
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     FR 2362165
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                            19780317
                                          FR 1977-24965
                                                           19770812
     NO 7702843
                       Α
                            19780217
                                          NO 1977-2843
                                                           19770815
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                            19771216
                                          BE 1977-180207
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     ES 461640
                       A1
                            19781201
                                          ES 1977-461640
                                                           19770816
PRIORITY APPLN. INFO.:
                                       US 1976-714317
                                                           19760816
                                       US 1977-781828
                                                           19770328
     An aqueous solution containing NaOH, m-phenylenediamine-resorcinol copolymer
AB
(I)
     [51774-88-0], and a dispersant such as poly(vinyl alc.) (II)
     or hydroxypropyl Me cellulose [9004-65-3] was sprayed on the interior
     surfaces of a polymerization reactor to minimize PVC [9002-86-2] deposition on
     the surfaces during the manufacture of PVC by suspension polymerization Thus,
an aqueous
     solution containing I 0.02, II 0.004, NaOH 0.2, and Na ascorbate 0.05% was
     sprayed on reactor surfaces which were then rinsed with water.
IT
     1310-73-2, uses and miscellaneous 9003-39-8
     RL: USES (Uses)
        (antifouling coating compns. containing, for polymerization
        reactors for vinyl monomers)
RN
     1310-73-2 CAPLUS
     Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
CN
Na-OH
RN
     9003-39-8 CAPLUS
CN
    2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
    CM
         1
    CRN 88-12-0
```

CMF C6 H9 N O

IC C08F002-00

CC 36-3 (Plastics Manufacture and Processing)

ST PVC manuf nonfouling; phenylenediamine resorcinol copolymer antifouling

IT Fouling

(prevention of, of reactors for polymerization of vinyl monomers)

IT Polymerization

(suspension, of vinyl chloride, antifouling coatings for reactors in)

IT 1310-73-2, uses and miscellaneous 9002-89-5 9003-39-8

9004-65-3 51774-88-0

RL: USES (Uses)

(antifouling coating compns. containing, for polymerization reactors for vinyl monomers)

IT 9002-86-2P

RL: PREP (Preparation)

(manufacture of suspension, antifouling coatings for reactors in)

L32 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1976:24447 CAPLUS

DOCUMENT NUMBER:

84:24447

TITLE:

Visual recording

INVENTOR(S):

Watanabe, Akio; Murata, Yasuzo

PATENT ASSIGNEE(S):

Pilot Pen Co., Ltd., Japan

SOURCE:

U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3870435	Α	19750311	US 1972-290353	19720919
PRIORITY APPLN. INFO.	:		JP 1969-54399	19690709
			US 1970-53054	19700707

The poor handling properties of the ink used in pen-writing type recording in measuring instruments are overcome with the use of an ink containing a colorless or light-colored color coupler in conjunction with a recording sheet a mineral acid 1, an developwr which reacts with the coupler to form visual record of vivid color and highly durable nature. Thus, an aqueous ink containing V2O5 9, NaOH 6, a a Na alkylnaphthalenesulfonate 1, poly(vinylpyrrolidone) 20, and water 964 g was used in combination with a recording paper coated by a composition containing lauryl gallate 1, vinyl resin a mineral acid 1, an 1, organic acid 2, silicic acid fine powder 3, and EtOAc 10 g to provide a visual jet-black recording

```
without interrupted ink inscription or ink blotches.
IT
     1310-73-2, uses and miscellaneous 9003-39-8
     RL: USES (Uses)
        (ink containing vanadium pentoxide and, for instrument pen-type recording)
     1310-73-2 CAPLUS
RN
     Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
CN
Na-OH
RN
     9003-39-8 CAPLUS
CN
     2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 88-12-0
     CMF C6 H9 N O
  CH = CH_2
IC
    B41C
NCL 117036200
     74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)
     Section cross-reference(s): 42
st
     recording paper instrument ink
     Copying paper
        (for instrument pen-type recording, containing color developer)
IT
     Inks
        (for instrument recording, containing color coupler)
IT
    Recording
        (pen-writing, instrument, ink-paper combination for)
IT
    Naphthalenesulfonic acid, sodium salt, alkyl derivs.
    RL: USES (Uses)
        (ink containing vanadium pentoxide and, for instrument pen-type recording)
     56-81-5, uses and miscellaneous 9004-53-9
IT
    RL: USES (Uses)
        (ink containing ammonium metavanadates and, for instrument pen-type
        recording)
    1310-73-2, uses and miscellaneous 9003-39-8
IT
    RL: USES (Uses)
        (ink containing vanadium pentoxide and, for instrument pen-type recording)
IT
    1314-62-1, uses and miscellaneous
                                         7803-55-6
    RL: USES (Uses)
        (ink containing, as color coupler, for instrument pen-type recording)
IT
    67-56-1, uses and miscellaneous 78-93-3, uses and miscellaneous
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87-18-3 141-78-6, uses and miscellaneous 1166-52-5 1343-98-2
9011-13-6 25322-68-3 57683-21-3
RL: USES (Uses)
  (recording paper coating composition containing, instruments, for color coupler-containing ink)
```

=> td que

11365 TD

3401 TDS

14590 TD

(TD OR TDS)

595 QUE

9 QUES

604 QUE

(QUE OR QUES)

L33

0 TD QUE

(TD (W) QUE)

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